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# Vegetable Situation

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Economics, Statistics,  
and Cooperatives Service

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U.S. Department of  
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NOVEMBER  
1978

Approved by the  
World Food and  
Agricultural Outlook  
and Situation Board



## OUTLOOK CONFERENCE, NOVEMBER 13-16, 1978

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There is no fee for the conference and we look forward to seeing you.

# THE VEGETABLE SITUATION

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## SUMMARY

### Processed Vegetable Supplies Tighter— Prices Moderately Higher

Raw tonnage of seven major *processing vegetables* in 1978 is expected to fall to 10.6 million tons, 8 percent less than last year. Growers and processors substantially cut their tomato acreage because of large carryovers of all tomato products except juice. Carryovers of other canned vegetables were light, and with the 1978 pack of most important items probably only of moderate size, canned vegetable supplies will be tighter than the generous supplies a year earlier. Frozen vegetable stocks on October 1 were 1.8 billion pounds, 11 percent more than a year earlier. This includes a substantial share of the 1978 pack. Total supplies of all processed vegetables will be adequate, but with a strong consumer demand and rising marketing costs, some further moderate price rises are occurring.

Fresh market vegetable supplies this fall will be almost 4 percent larger than last year, providing yields hold close to their historical averages. Demand for fresh vegetables is expected to continue strong and grower prices are expected to be slightly higher than a year earlier. Retail prices will be running moderately above the fourth quarter of 1977 due to a rise in marketing costs.

The United States *fall potato* crop is again record large—1.5 percent higher than the previous record of 1976. The acreage harvested was 1 percent larger than 1977, and the average yield across the country was up slightly to 272 cwt. per acre in line with the historical trend. This crop is generally one of exceptionally good quality, and one that can be expected to store well.

Processor demand for potatoes is expected to hold strong, as the market for frozen fries continues to make good gains. However, prices the first part of the storage season are expected to remain near last year's low levels. Mid-October f.o.b. prices were running slightly higher than a year earlier at most eastern and midwestern shipping points. Russet prices of western origin were substantially below October levels in 1977.



Although *dry bean* prospects declined during September, the crop of 18.6 million cwt. is the largest in four years. This is not unusually large by historical standards, but the prospect of a large

crop caused prices to move lower through the past summer. Average prices can be expected to remain below a year earlier unless some unusually strong export activity develops.

## RECENT DEVELOPMENTS AND OUTLOOK

### FRESH VEGETABLES

Fall fresh market vegetable acreage is 4 percent more than a year earlier. A 4-percent greater production is also expected for 14 vegetables excluding melons if yields follow the recent historical average.

There will be more acres of snap beans, cabbage, carrots, cauliflower, cucumbers, green peppers, spinach, and tomatoes. Fewer acres of broccoli, celery, sweet corn, escarole-endive, and lettuce have been planted.

#### Higher Production— Higher Prices in 1978

Fresh market vegetable prices to growers during the spring and early summer have averaged sharply higher than a year earlier because the usual supply patterns of lettuce, celery, and a few other California vegetables were disrupted. Curiously enough, total supplies were not greatly different from a year earlier, but crop values were sharply higher. In fact, 10 percent more spring lettuce was worth three times as much as a year earlier. This reflects, in part at least, a more rigid demand pattern associated with fast food oper-

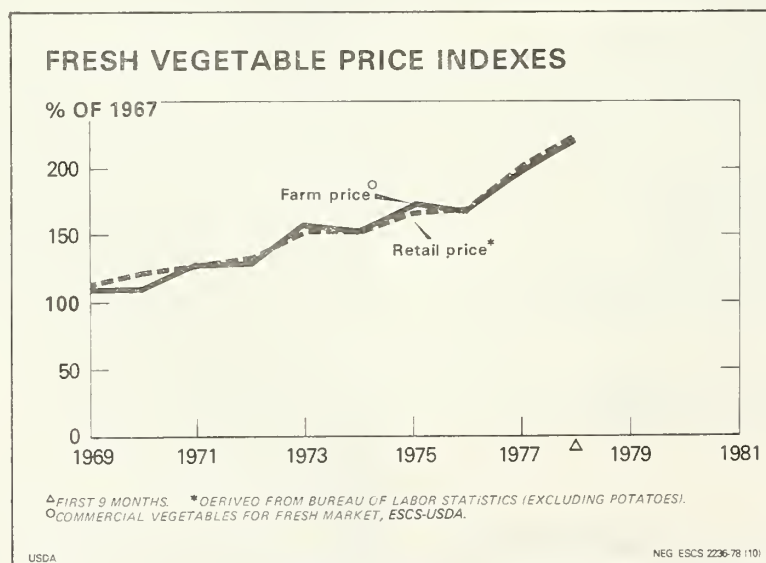
ator's dependence on lettuce from a single production area to supply an increasing number of "salad bars." The California 1978 spring crop was worth \$260 million against only a more typical \$80

Fresh vegetable supplies<sup>1</sup>

Supply	1977	1978
	1,000 cwt.	
U.S. winter production—		
major States . . . . .	29,066	33,120
U.S. spring production—		
major States . . . . .	61,312	60,700
U.S. spring onions . . . . .	5,372	5,673
Imports (Jan.-June) . . . . .	15,966	17,402
Total six months supply . . . . .	111,716	116,895
U.S. summer production—		
major States . . . . .	66,942	<sup>2</sup> 68,302
U.S. fall production—		
major States . . . . .	47,697	<sup>2</sup> 49,860
U.S. summer onions . . . . .	20,480	21,253
Imports (July-Dec.) . . . . .	2,983	N.A.
Annual supply . . . . .	249,818	+2 to +4%

<sup>1</sup> Includes melons. <sup>2</sup> Based on historical average yields.  
<sup>3</sup> Excludes California.

N.A.—Not available.



million for the spring of 1977. For the entire year, crop values for all fresh vegetables combined will far exceed the previous record.

Total supplies for the first half of 1978 were actually 4 percent larger than a year earlier, the result of larger winter harvests, and increased imports, offsetting slightly smaller spring tonnage.

Supplies the last half of the year may be close to 4 percent more than a year earlier if yields equal the historical average, and for the entire year domestic tonnage and imports would still add up to 3 to 4 percent more than a year earlier.

After the disrupted supply pattern of the spring, supplies of fresh vegetables increased seasonally by late July. At that time, grower prices skidded sharply, and by September were very close to a year earlier. However, the July price kept summer (third) quarter prices substantially higher than a year earlier. With usual supply patterns for the balance of the year a stable price level at or slightly higher than a year earlier is expected.

Retail prices for fresh vegetables have followed the pattern of grower prices, although in somewhat less volatile fashion. Demand for fresh vegetables has been exceptionally strong this year, and is likely to remain that way as long as the general level of economic activity holds high. As previously

noted, one particular segment of demand—the fast food industry with its salad bars in particular—probably contributed to the unusually high lettuce prices late this spring.

### Fresh Vegetable Exports Small, But Rising

Fresh vegetable exports have never been large, but in recent years producers and their associations have been showing considerable interest in this aspect of market development.

There has been some upward trend in the percent of production exported for five of the six key fresh market vegetables covered in this report—cabbage, carrots, celery, lettuce, onions, and tomatoes. In 1975-77 there was a slightly larger proportion of crop exported for celery and lettuce, moderately larger for carrots and onions, and a substantially larger proportion exported of tomatoes than in an earlier period, 1969-71. Only a slightly smaller portion of the cabbage crop was exported in 1975-77 than the previous period.

Quarterly index of farm prices for fresh vegetables<sup>1</sup>  
1967=100

Year	1st.	2nd.	3rd.	4th.	Annual
1970 .....	125	113	103	97	110
1971 .....	125	129	106	143	126
1972 .....	134	126	123	133	129
1973 .....	160	143	145	126	156
1974 .....	143	164	143	158	152
1975 .....	168	183	165	174	173
1976 .....	178	154	166	183	170
1977 .....	255	183	166	185	197
1978 .....	206	265	190		

<sup>1</sup> Excludes potatoes.

ESCS, USDA.

Quarterly retail prices for fresh vegetables<sup>1</sup>  
1967=100

Year	1st.	2nd.	3rd.	4th.	Annual
1970 .....	130	131	111	111	121
1971 .....	119	137	120	129	126
1972 .....	137	134	128	133	133
1973 .....	151	167	153	138	152
1974 .....	150	160	152	151	153
1975 .....	168	169	165	160	166
1976 .....	170	168	165	179	170
1977 .....	221	216	178	184	200
1978 <sup>2</sup> .....	212	247	209		

<sup>1</sup> Excludes potatoes. <sup>2</sup> Consumer Price Index-All Urban.

USDA estimate derived from Consumer Price Index.

FRESH VEGETABLE EXPORTS

	1969-71 average	1975-77 average
<i>Million pounds</i>		
Cabbage .....	64.2	64.8
Carrots .....	61.6	93.9
Celery .....	108.3	126.3
Lettuce .....	274.3	350.0
Onions .....	140.9	222.8
Tomatoes .....	97.1	194.7
<i>As a percent of production</i>		
	1969-71 average	1975-77 average
Cabbage .....	3.4	3.3
Carrots .....	3.3	4.8
Celery .....	6.8	7.7
Lettuce .....	5.9	6.4
Onions .....	4.8	6.7
Tomatoes .....	5.3	9.4

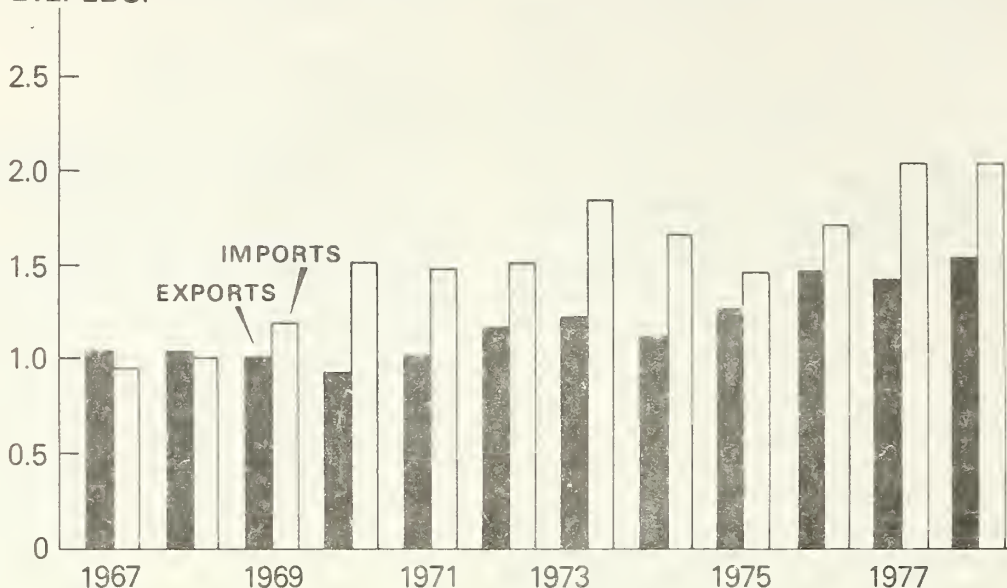
Currently nearly one tenth of U.S. tomato production is exported with nearly all going to Canada. The pattern of Canadian imports of U.S. tomatoes is fairly even during the months April through December.

Nearly 7 percent of the U.S. onion production was exported during the period of 1975-77. Canada has been by far our largest customer, although Japan has also been a very important buyer. Normally, Europe is not a very large purchaser of U.S. onions, and the drought year of 1976 was an exception.

Around 90 percent of U.S. exports of cabbage, carrots, celery, and lettuce also go to Canada with

## FRESH VEGETABLES — FOREIGN TRADE

BIL. LBS.



\*FRESH VEGETABLES INCLUDES MELONS 1978 ESTIMATED

USDA

NEG. ESCS 317-78 (9)

the heaviest shipping taking place October through June.

### Prospects for Leading Items

#### Onions

Summer storage onion production is estimated at 18.2 million cwt., a 5-percent increase over last year. Prices in October for eastern yellow and western whites were below last year's level and will probably remain so for the rest of the season. However, western yellow and Spanish type onions were selling for substantially more the first half of the same month. With a relatively large crop to move, prices to growers will not likely show any great strength, at least for the early part of the storage season. There is one notable exception to this prospect in the West. This season, Japan has shown some interest in buying from growers in the Malheur County, Oregon-Western Idaho district in addition to making their usual purchases from western Oregon. Since the latter crop was unusually small this year this development could stabilize western onion prices.

With favorable weather prevailing in major onion-producing countries of Western Europe, U.S. exports to that part of the world during the 1978-79

#### ONIONS : U.S. GROWER PRICES



USDA

NEG. ESCS 1967-78 (8)

shipping season (October to September) will probably be no more than 1 or 2 percent of total U.S. exports. As in 1977-78, Canada will probably be our largest customer with Japan being second.

For 1979, Texas spring crop growers intend to plant 24,200 acres—6 percent less than in 1978. In the Lower Rio Grande Valley, rainfall from February to September has been well below normal. This dry condition has allowed salt residues to accumulate at high levels in the soil. In some sections of

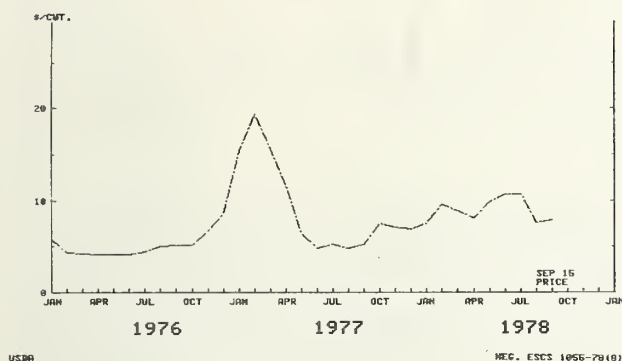


the valley, September rains have brought relief from salt build-up but such rains delayed land preparation and planting activities. Wet weather also delayed some planting operations in Winter Garden and Laredo.

## Cabbage

There are 29,400 acres of cabbage for fall harvest in 1978, 5 percent more than in 1977. With average yields, this would result in production very close to that of last year. In New York, which is the largest volume producer of fall cabbage, weather conditions were generally favorable for crop development. Needed rain improved head sizing but also caused some splitting. Other producing States have experienced rather dry

CABBAGE : U.S. GROWER PRICES



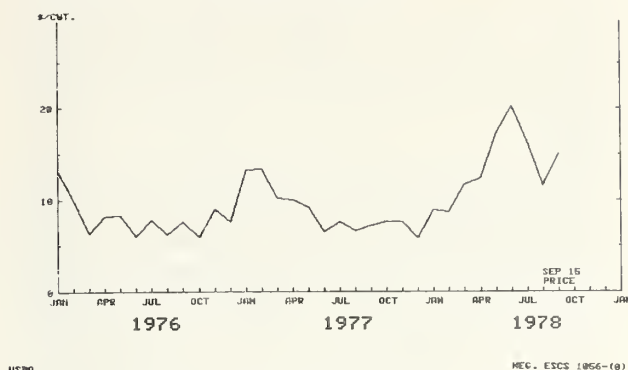
conditions. In parts of southern New Jersey, growers irrigated because of limited rainfall. Ohio also needed rain for proper head sizing. There has also been some problem with insects in most of the producing States.

## Celery

Fall acreage in the four principal producing States was 9,000 acres—3 percent below last year—with decreases in California and New York, increases in Florida, and no change in Michigan. Based on average yields, a 2-percent smaller crop than last year is possible. In New York, quality and yield of celery has been superb. Harvest is nearing completion in Michigan with almost 90 percent of the celery crop in. Rains have slowed the remaining harvest and caused some abandonment. Both Florida and California are experiencing favorable growing conditions and are expected to be on schedule for harvest.

Celery prices since March have been at record high levels and are likely to continue high with this smaller supply in prospect.

CELERY : U.S. GROWER PRICES

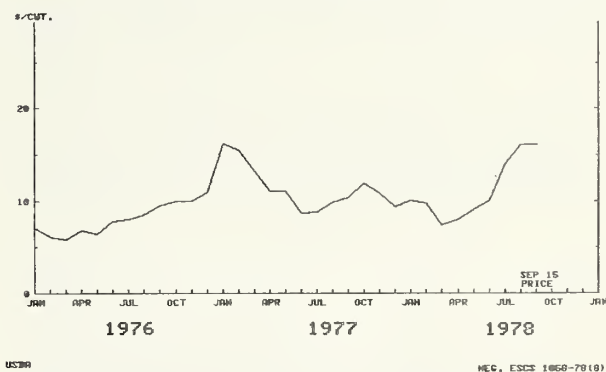


## Carrots

Fall carrot acreage for harvest is 26,200 acres in the major producing States, 24 percent larger than in 1977. Acreage increases have occurred in all States except Michigan and Washington. Excluding the desert areas, California, by far the leading State, increased its acreage by 27 percent. By more than doubling its fall carrot acreage, Texas became the second largest grower of fall carrots in the United States in 1978. Based on average yield, fall carrot production could be 8.25 million cwt., or 20 percent above a year earlier.

Prices during the first half of the year were well below last year's very high prices, but were still above the levels of 1976. Beginning in July, prices have been at record high levels. But with prospects for a much larger crop, prices may be expected to drop sharply in the late fall months should current favorable growing and harvest conditions prevail.

CARROTS : U.S. GROWER PRICES



## Sweet Corn

Most of the sweet corn during the fall quarter comes from the Florida Everglades, where an 8-

percent smaller acreage is expected. The U.S. acreage is only 6 percent less this year due to a 14-percent increase in California, where the limited planting of this crop is used for the local market.

## Lettuce

With both California and Arizona showing a reduction in acreage, the U.S. 1978 fall crop of lettuce, at 59,900 acres, will be 1 percent smaller than last year. Projected production based on average yields at 13.6 million cwt. is also down 1 percent from a year ago.

Weather conditions for growing and harvesting fall crop lettuce up until now have been generally favorable in all major producing areas. Shipping point prices for lettuce during the summer months, while not exhibiting the wild gyrations during spring months, nevertheless did fluctuate rather widely—if at moderate levels. For example, f.o.b. prices in the Salinas Valley reached a high of \$4.50 during the third week in July, but dropped sharply to \$2.75 the following week. Prices continued dropping until the middle of August to \$2.10. Then they partially recovered to \$2.58 during the last week of August only to reach a new low of \$2.03 at the beginning of September. Recovering to \$2.53 during the first week of September, f.o.b. lettuce price again rose sharply—this time to \$4.25—but were off a dollar to stand at \$3.25 by the end of September. There has been some further reduction the first half of October.

LETTUCE : U.S. GROWER PRICES



USDA

HEB. ESCS 1959-78 (B)

Given the history of the behavior of lettuce prices since January, it is difficult to predict what the price pattern will be during the fall months. Sufficient acreage is planted to hold prices to current moderate levels. Unfavorable weather conditions—either cold or heavy rains—in one or more major shipping districts, coupled with the rigid buying practices of large volume users, could

cause another round of short supplies and wide gyration of prices for a limited period this fall and early winter.

## Tomatoes

U.S. fall tomato plantings at 25,600 acres are 9 percent larger than a year earlier. Average yields would suggest a 13-percent larger crop this fall. In Florida, staked acreage dropped 3 percent to 9,600 acres while ground acreage increased a third, to nearly 4,200 acres. The first fall harvest began in the Palmetto-Ruskin area in mid-October, with crop conditions ranging good to excellent. In California, tomato picking is active in the San Joaquin and Salinas Valleys, but most of the late season volume will originate from the South Coast. These two States are expected to account for 94 percent of the fall crop. Small acreages are reported in Texas and Alabama.

TOMATOES : U.S. GROWER PRICES



USDA

HEB. ESCS 1964-78 (B)

Prices for tomatoes are expected to show some seasonal rise before the end of the fall period. However, the larger acreage planted in California and especially in Florida does suggest average prices lower than last year.

## PROCESSED VEGETABLES

### Raw Tonnage of Processing Vegetables Less This Year

Raw tonnage of seven major processing vegetable crops is expected to fall to 10.6 million tons, 8 percent below a year earlier. Growers and processors planned a substantial tomato acreage cut because carryovers of all tomato products except juice were large. Wet weather followed by frost in Wisconsin cut short the last of the snap bean and corn harvests in the upper Midwest.

## Larger Tomato Pack Carried Over

The total canned vegetable carryover into 1978/79 was larger than a year earlier, only because most tomato products were in heavy supply. When the tomato items are excluded from the mix of canned vegetables, moderately less remained on hand at the end of the old season. At this time, it appears that total supplies of all major canned vegetables—tomato products, corn, snap beans, and peas—will be moderately less than a year earlier.

Canned vegetable supplies and disappearance<sup>1</sup>

Year	Pack and carryover	Disappearance
<i>Million cases 24/303's</i>		
1974/75 .....	359	308
1975/76 .....	408	334
1976/77 .....	387	327
1977/78 .....	389	332
1978/79 .....	<sup>2</sup> 374	—

<sup>1</sup> 10 items combined which account for roughly 50-55 percent of raw product tonnage. <sup>2</sup> Projected-based on Sept./Oct. ESCS raw tonnage estimates.

The frozen vegetable carryover on August 1, 1978 for seven important freezing vegetables was 497 million pounds, 29 percent more than the small supply remaining a year earlier. Even if new packs are slightly reduced, the supply available for 1978/79 markets is likely to be about the same as a year earlier.

Therefore, total supplies of canned and frozen vegetables are expected to be adequate, but tighter than a year earlier. The adjacent table for 10 canned items does not include the important packs of tomato paste, sauce, and catsup which will be a reduced but adequate supply. Although data are not yet available, if prospective packs are added together total supplies will be slightly to mod-

erately less, though large enough to cover expected disappearance.

Stocks of frozen vegetables on October 1 were 11 percent larger than a year earlier. This includes a good portion of the 1978 pack and takes into account a carryover this past summer that also was larger than in other recent seasons. Limited additions to the 1978 main pack season may be made, and as usual there will be winter freezing of spinach in California, followed somewhat later by broccoli, carrots, and cauliflower.

Prices for processed vegetables have been firm to stronger since early summer. Some further moderate rises are expected. The ESCS index of canned vegetable prices rose 3 percent between July and August, anticipating somewhat tighter supplies of peas, canned tomatoes, tomato paste, sauce, and catsup. The September figure (1967=100) of 181 rose by 5 points in October. Some further rise may be expected.

Prices for frozen vegetables also have been firm, and in some cases slightly higher in recent weeks.

## Prospects for Leading Items

### Peas

Contract tonnage of peas for canning and freezing was only 4 percent larger this year. With low carryover stocks as well, supplies of canned peas are tight, and frozen pea stocks are only large enough to sustain the movement of last year. The American Frozen Food Institute noted that the 1978 preliminary pack of frozen peas was 351 million pounds, 5 percent more than a year earlier. The total supply for 1978/79, therefore, was only 1 percent more than the modest quantity available a year earlier. The 1978 pack of canned peas at 25.3 million cases was the smallest of recent record, and supplies will not be large enough to maintain recent annual rates of disappearance. This will cause some buyers to shift from peas to corn and snap beans.

Frozen vegetable stocks, October 1

Commodity	1976	1977	1978
<i>Mil. lbs.</i>			
Lima beans .....	92.2	68.3	86.9
Snap beans .....	180.9	175.3	212.6
Sweet corn <sup>1</sup> .....	359.2	443.1	476.3
Green peas <sup>2</sup> .....	374.4	319.4	338.0
Spinach .....	93.5	83.8	338.0
Broccoli .....	58.3	91.7	93.5
Carrots <sup>2</sup> .....	51.6	56.5	77.7
All frozen (excluding potatoes) .....	1,585.8	1,601.9	1,776.3

<sup>1</sup> Sweet corn on-cob not converted to cut equivalent. <sup>2</sup> Peas and carrots mixed not included.

Canned green peas: Supply and disappearance

	1976/77	1977/78	1978/79
<i>Mil. cases 24/303's</i>			
Carryover .....	8.4	7.7	4.4
Pack .....	31.9	30.2	25.3
Total supply ....	40.3	37.9	29.7
Disappearance ...	32.6	33.5	

Wholesale case prices for consumer sizes of sweets this September were half a dollar more than a year earlier, and 6/10 institutional packs were quoted 75¢-\$1.50 per case more than a year ago. On the other hand, prices for frozen peas have been holding steady, with no change in the lists of a



year earlier. For 1978/79, prices of both canned and frozen will be holding firm to stronger.

### Lima Beans

Lima bean tonnage for canning and freezing is 84,900 tons, 14 percent more than last year. Further increases in California are largely responsible, although production is up in all reporting States including Maryland and Delaware. The larger California tonnage will be frozen. Carryover stocks of frozen Fordhooks were unusually light, with baby limas slightly larger than the average of the past four years.

Prices for frozen Fordhooks have been steady for the past year, and baby limas have been running slightly weaker. However, with prospects that average yields of late harvested tonnage may be off, and with the tighter supply pattern of other processed vegetables, firm to stronger prices in the months ahead are likely.

The carryover of canned limas was only 290,000 cases, the second smallest of record. Much of the larger tonnage available in Wisconsin, Maryland, and Delaware goes for canning. Current prices are sharply higher than a year earlier. New pack price openings were at the high end of the range of list prices for old pack, or for some sizes, 50¢ or so per case higher.

### Snap Beans

Although the estimated tonnage of snap beans for canning and freezing is 9 percent larger this year, total supplies are expected to be only adequate for trade needs. The carryover of canned beans was again very light, 5 million cases 24/303's, and the current pack, while expected to be larger than a year earlier, will not set any records. Prices are already higher than a year earlier, and further advances are expected.

Canned snap beans: Supply and disappearance

	1976/77	1977/78	1978/79
<i>Mil. cases 24/303's</i>			
Carryover .....	13.6	5.7	5.0
Pack .....	47.4	54.5	
Total supply ....	61.0	60.2	
Disappearance ...	55.3	55.2	

Carryover stocks of frozen snap beans on July 1 were 41 million pounds, the second smallest in recent years. By October 1, stocks had increased back to 213 million pounds which is a more typical figure for that particular month. During September, prices advanced slightly with current lists at \$6.55 per 24/9 ounces case compared with

\$6.30 a year earlier. Institutional packs are bringing 41¢ pound compared with 40¢ a year earlier.

### Sweet Corn

Contracted tonnage of sweet corn for both forms of processing is 2.4 million tons, 4 percent more than a year earlier. This year, the Midwest canning States may turn out to pack less while the predominantly freezing States of the Pacific Northwest expect to handle a larger tonnage this year. In the major canning and freezing States, yields have been reported average this year.

Disappearance of canned corn during 1977/78 was record large, as heavy stocks and attractive prices stimulated movement. The resulting carryover of 7.6 million cases 24/303's was lower than either of the two previous seasons. Although the 1978 pack probably will be moderately smaller, total supplies probably will be large enough to sustain a movement equal to most other recent seasons except 1977/78.

Canned sweet corn: Supply and disappearance

	1976/77	1977/78	1978/79
<i>Mil. cases 24/303's</i>			
Carryover .....	9.7	9.7	7.6
Pack .....	54.7	56.3	
Total supply ....	64.4	66.0	
Disappearance ...	54.7	58.4	

The combined carryover of cut and on-cob frozen corn has differed little from a year earlier. However, larger packs will boost supplies for 1978/79. September stocks, which include some of the new pack, were 2 percent larger than a year earlier.

Prices of canned corn have advanced recently, reflecting the reduction of heavy supplies of a year earlier. Further advances are expected. On the other hand, frozen corn prices are steadier. Prices are slightly higher than a year earlier for both on-cob and cut packs. Institutional packs of cut are being quoted at 33¢ a pound compared with 32¢ a year earlier. Firm prices are expected for most of 1978/79.

### Tomatoes

Contracted tomato tonnage this year is 14 percent smaller, largely because the crop in California is 16 percent less than in 1977. There is also some reduction in both the Mid-Atlantic States and in the Midwest. Reductions in New Jersey, Pennsylvania, and Ohio offset gains in Indiana, Virginia, and Maryland. Deliveries to California can-



Canned tomatoes: Supply and disappearance

	1976/77	1977/78	1978/79
	<i>Mil. cases 24/303's</i>		
Carryover .....	12.0	9.4	16.0
Pack .....	42.8	54.1	
Total supply .....	54.8	63.5	
Disappearance .....	45.4	47.5	

ners as of September 30 totaled 5.4 million tons, indicating that the total used would come close to the total planned for this season. Substantial reduction of raw tonnage was required to bring supplies of tomato products more closely in line with expected requirements for 1978/79. At this time, the mix of the various tomato products is not known, but in general, the excessive supply situation of 1977/78 no longer exists. With a large carryover of 16 million cases of canned tomatoes, September wholesale prices for 24/303's standard grade California product were \$6.50 per case and 6/10's were \$8.75, both the same as a year earlier. These prices may strengthen in the weeks ahead, depending on supply developments. The carryover of tomato juice was on the light side, 5.5 million cases (24/303 equivalent), and prices for 12/46 ounce juice from California were listing at \$5.90 per case versus \$5.35 a year earlier. As of late September, some canners had posted higher list prices for catsup, paste, and sauce, but little trading has taken place thus far. Buyers seem to be waiting out the market.

Canned tomato juice: Supply and disappearance

	1976/77	1977/78	1978/79
	<i>Mil. cases 24/303's</i>		
Carryover .....	6.6	8.8	5.5
Pack .....	32.2	27.8	
Total supply .....	38.8	36.6	
Disappearance .....	30.0	31.1	

### Highlights for Other Processed Vegetables

Although the carryover of *canned beets* was sharply lower, the current pack is expected to be large enough to bring on a normal supply. Prices are currently slightly to moderately higher than a year earlier. The contract tonnage of cabbage to be used for *sauerkraut* has been planned to exceed last year by 6 percent, but trade observers noted that heavy rains in Wisconsin cut the supply of raw cabbage, so that list prices for new pack now are sharply higher. U.S. October 1 stocks, which reflect some new pack, were the lowest since 1973. *Frozen broccoli* stocks on October 1 were 93 million pounds, slightly more than a year earlier just

before the fall pack season was getting underway in California. Prices for various styles and packs have not changed from a year earlier. Sharply larger stocks of *frozen cauliflower* are on hand, and some "deals" are reported in an effort to stimulate movement. *Frozen spinach* is in relatively light supply with prices advancing in the early fall weeks to levels sharply higher than a year earlier. October stocks were the smallest since 1970. Larger supplies of *frozen carrots* do not seem to be depressing prices for this increasingly popular frozen item.

## POTATOES

### Record Fall Tonnage

The U.S. fall potato crop is again record large, 1.5 percent higher than the previous record of 1976. The acreage harvested was 1 percent larger than 1977, and the average yield across the country was 272 cwt. per acre. This high yield maintains the historical trend which has long been a part of this industry. Improved yields not only are a result of improved management and technology applied to production, but are also a reflection of the continuing shift of the industry to parts of the West where the highest average yields are attained.

This year, production in the western States is 197 million cwt., 4 percent more than last season. There are larger crops in all major States except Washington, where acreage was reduced. A high quality crop was dug in most of Idaho, with growers reporting a large proportion of size A's.

In the Midwest, the crop is the same size as last year. A rather surprising development was the sharply higher than average yields in the Red River Valley. Production there exceeded last year, despite the reduced acreage. Storage space there is short, as growers seek even temporary facilities to hold the crop. Elsewhere in the region, Michigan, Wisconsin, and Ohio have less to sell this season.

In the East, the reduced yields in Maine pushed production 10 percent below a year earlier. In that State, rain was short during August, reducing yields to 215 cwt. per acre, the smallest since 1973. In New York there is more Upstate, but less than 1977 on Long Island. Pennsylvania's relatively early harvest was slightly smaller this year.

This is the second year that the Crop Reporting Board has shown the percent of acreage planted by major type of potato. These data include 11 fall producing States which account for 92 percent of the fall output. This season, Russets accounted for 64 percent of all fall acreage planted, 30 percent was in round whites, with the balance going for

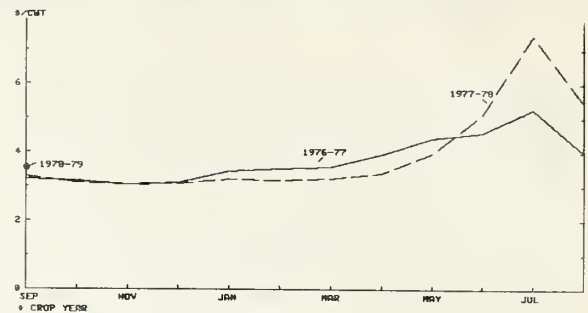
the red varieties. A year earlier, the comparable figures for round whites was 2 percent more, while round reds accounted for 7 percent of all acreage instead of six. The same tables show that the Russet is gaining ground in most of the Midwest at the expense of round whites. Even in Maine, 27 percent of the 1978 planted acreage was Russet compared with only 21 percent in 1977.

### Heavy Supplies to Keep Pressure on Potato Prices

The price outlook for this record crop is hardly a favorable one for the growers, at least for the first part of the marketing season. For the fourth quarter of 1977, the U.S. average grower prices for all methods of sales combined was \$3.08 per cwt. A 2-percent change in supply would suggest prices closer to \$3.00 this last quarter of 1978. However, processing contract prices which account for a significant portion of the crop in the Pacific Northwest are roughly a dime per cwt. higher than last season. The upward push of inflation may be strong enough this year to make itself felt, even at the level of farm prices for potatoes. Considering these factors, prices are expected to remain near the low levels of a year ago.

Nationwide, the 1978 crop is generally one of exceptionally good quality in many areas, which means it can store well. Processors can expect very good recovery rates, thus making more out of a given supply of raw product. In addition, it is difficult to ascertain how much a good quality crop will stimulate fresh market sales. These are some of the basic conflicting elements that bear upon the price and demand situation this fall.

### POTATOES : U.S. GROWER PRICES \*



USDA

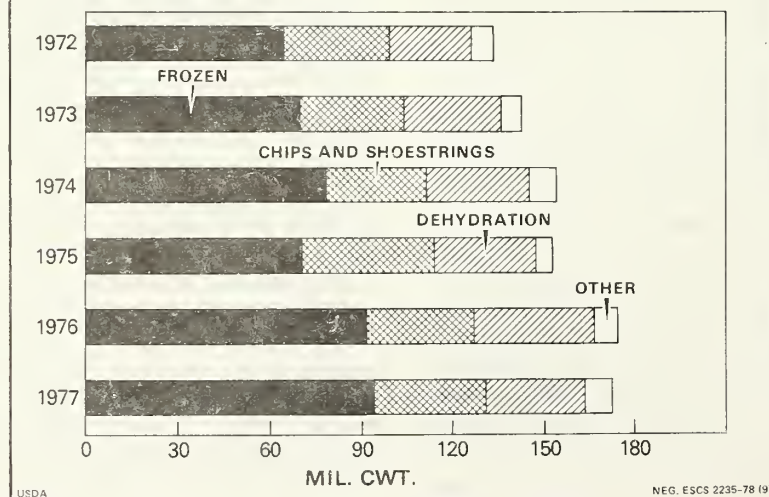
NEG. ESCS 3073-78 (18)

### Fairly Good Processor Demand

Processor demand this fall may be expected to continue reasonably strong, about the same as for the season now ending. Stocks of frozen potato products on October 1 were 651 million pounds, 6 percent more than on the comparable date a year earlier. This larger figure may be regarded as having a minimal effect on demand for raw product this fall, because use of frozen products continues its long-term expansion. On the other hand, the demand for flakes and granules may be expected to hold fairly steady, perhaps improving moderately from the 1977 pattern.

Chip usage in 1978/79 can be expected to reflect the same turn taken by the entire economy. However, the potential supply of round white varieties for chipping may be moderately less than a year earlier. The Midwest has grown more Russets this year, and total production in the East, where

### PROCESSED POTATO USE



USDA

NEG. ESCS 2235-78 (9)



round varieties predominate, is less. If purchasing power holds up, chip use would be well maintained or increase slightly.

Total processing demand is now expected to exert a stabilizing influence on fall potato prices with the prospect of more potatoes going for the various processing uses in 1978/79.

#### Winter Crop Acreage Up Slightly

Acreage of potatoes to be grown in Florida and California for winter harvest (early in 1979) is up slightly over a year earlier in both States. Production from this seasonal grouping, which accounts for only 1 percent of U.S. production volume, does not carry an important price-supply implication, since these potatoes are often considered a specialty item.

#### Total Food Use Somewhat Less for Crop Year 1977/78

Looking at the uses made of the 1977 potato crop, total food use declined as both table stock and processing outlets absorbed about 9 million cwt. less. With a smaller total crop, some decline was to be expected. Table use (fresh market)

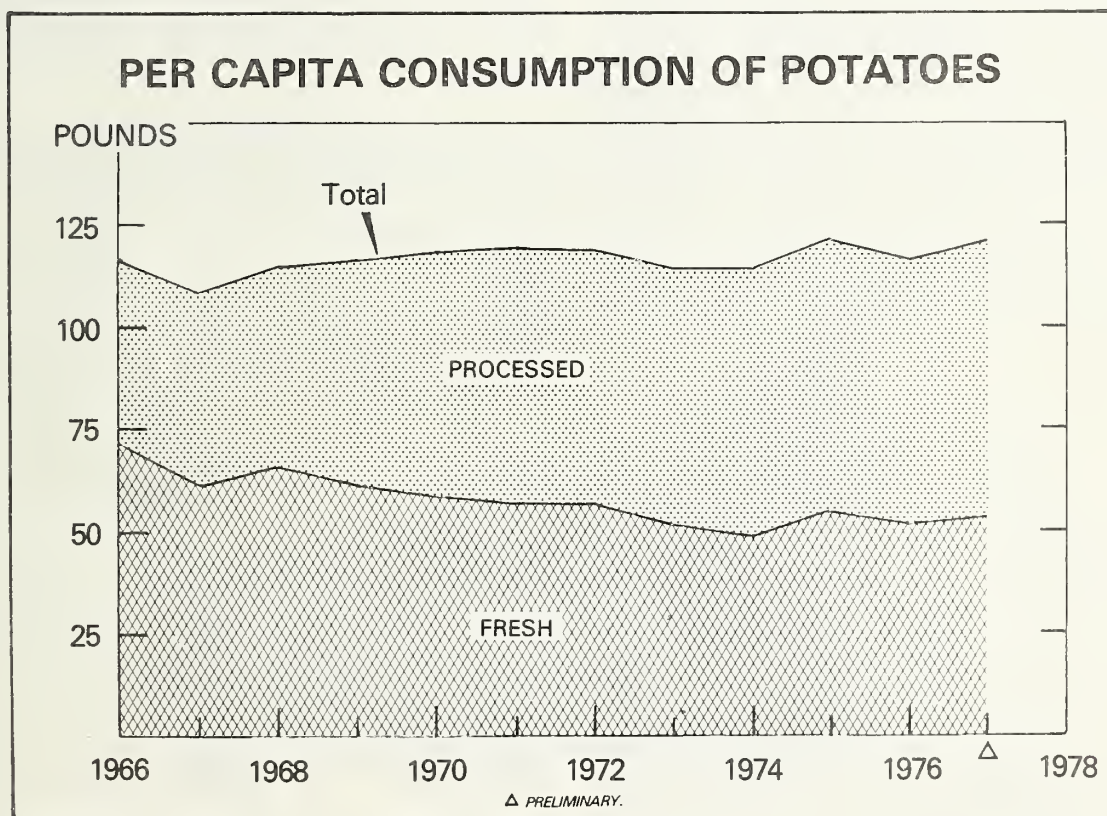
dropped 6 percent, and processed use dropped little more than a percentage point. Sharply lower dehydrated use was not fully offset by increased activity in the chip, canning, and freezing sectors.

Recent per capita consumption trends in the potato industry show that fresh use seems to be bottoming out, and that total processing is making further gains. Frozen product use keeps growing, and is gradually approaching fresh use. The fortunes of dehydrated potatoes partly reflect the vagaries of the reconstituted chip business.

Crop year potato exports<sup>1</sup>  
(Fresh weight basis)

Year	Dehydrated	Fresh	Total	Percent of Total crop
<i>Mil. cwt.</i>				
1974/75 . . . . .	1.7	3.6	5.3	2%
1975/76 . . . . .	10.0	10.0	20.0	6%
1976/77 . . . . .	16.1	11.0	27.1	8%
1977/78 . . . . .	6.2	3.4	9.6	3%

<sup>1</sup>These data may vary slightly from other USDA reports, since this table is based on a U.S. September through August crop year.



# Production and per capita consumption of potatoes, 1960-77

Year	Production	Per capita consumption						
		Total fresh and processed	Fresh	Processed <sup>1</sup>				
				Total	Canned <sup>2</sup>	Frozen	Chips and shoestrings	Dehydrated
	<i>Million cwt.</i>			<i>Pounds</i>				
1965 .....	291.1	107.0	68.2	38.8	1.7	14.3	15.8	7.0
1966 .....	307.2	116.8	72.4	44.4	1.7	17.3	16.7	8.7
1967 .....	305.8	108.0	62.0	46.0	1.7	19.0	16.9	8.4
1968 .....	295.4	115.2	65.9	49.3	1.9	21.2	17.1	9.1
1969 .....	312.6	116.9	61.7	55.2	2.0	24.6	17.7	10.9
1970 .....	325.7	117.5	58.3	59.2	2.0	27.7	17.7	11.8
1971 .....	319.3	118.7	56.8	61.9	2.2	30.3	17.3	12.1
1972 .....	296.4	119.4	57.4	62.0	2.1	30.6	17.0	12.3
1973 .....	300.0	116.8	51.9	64.9	2.3	33.2	16.6	12.8
1974 .....	342.4	114.3	48.4	65.9	2.3	33.0	16.1	14.5
1975 .....	322.3	122.1	55.0	67.1	2.0	34.7	15.9	14.5
1976 .....	357.7	116.4	51.2	65.2	2.0	36.9	16.2	10.1
1977 <sup>3</sup> .....	354.6	121.7	54.0	67.7	2.5	39.9	16.0	9.3

<sup>1</sup> Fresh-weight basis. <sup>2</sup> Includes potatoes canned in soups, stews, and other combinations. <sup>3</sup> Preliminary.

## Export Activity Little More Than Routine

For the period of September 1977 through August of this year, 3.4 million cwt. of fresh stock moved to foreign markets, mostly Canada. This is more or less on par with 1974 and earlier crop years. A similar pattern for fresh exports in 1978/79 may be expected, and nothing on the order of 1975 or 1976 is foreseen at this time.

Dehydrated potato exports fell sharply this season, though they will turn out to be somewhat higher than other years before the European shortage periods. Manufacturers of flakes and granules are keenly interested in developing new export outlets, and it is possible some further gains can be made, even for 1978/79. These products are now approved for export sales under terms of the Commodity Credit Corporation Export Sales Program.

With supplies of canned sweet potatoes virtually exhausted by the beginning of the new pack season, canners were actively bidding for raw stock in Louisiana and North Carolina early in September. In the latter State, canners were paying as much as \$3.00 per 50 pounds delivered. Since that time, prices have moved downward to \$1.75 as available supplies increased when harvest activity picked up

Pack of canned sweetpotatoes

Season	Million cases 24/303's
1970/71 .....	9.8
1971/72 .....	10.1
1972/73 .....	9.5
1973/74 .....	11.4
1974/75 .....	12.8
1975/76 .....	7.7
1976/77 .....	8.0
1977/78 .....	7.2

## SWEET POTATOES

The U.S. sweet potato crop at 13.8 million cwt. is the largest since the 1960's. Both acreage and yield are up this year, and the crop is 11 percent larger than 1977. Generally good growing and harvesting conditions in many States were responsible for the 116-cwt.-per-acre yield this season. Texas and Maryland are the only areas where the crop came up short. In North Carolina, half the harvest was complete by the end of September, and nearly two-thirds of the Louisiana crop was out of the ground by the same date. These two States account for 56 percent of the U.S. crop.

SWEETPOTATOES : U.S. GROWER PRICES \*



USDA

REC. ESOS 3074-78 (18)



volume. Opening prices for canned whole sweets in syrup were close to the high levels of the past summer, though a relatively wide range of prices exists at the present time. The Department of Agriculture recently purchased 413,600 cases of 6/10's syrup pack for distribution through domestic feeding programs. There was also some additional purchasing of canned mashed sweets and some dehydrated as well.

## MUSHROOMS

U.S. mushroom production set another record in 1977/78—moving up 15 percent over a year earlier to 399 million pounds. Pennsylvania, the leading State, accounted for 220 million pounds or 55 percent of the U.S. total. The average yield of 2.95 pounds per square foot is the highest average yield attained in the years since annual data have been published.

Fresh market sales of mushrooms, at 191 million pounds, rose 26 percent over a year earlier, and fresh use absorbed 48 percent of U.S. output. The average price for the crop moving through these market channels reached 90¢/pound, the highest price of record.

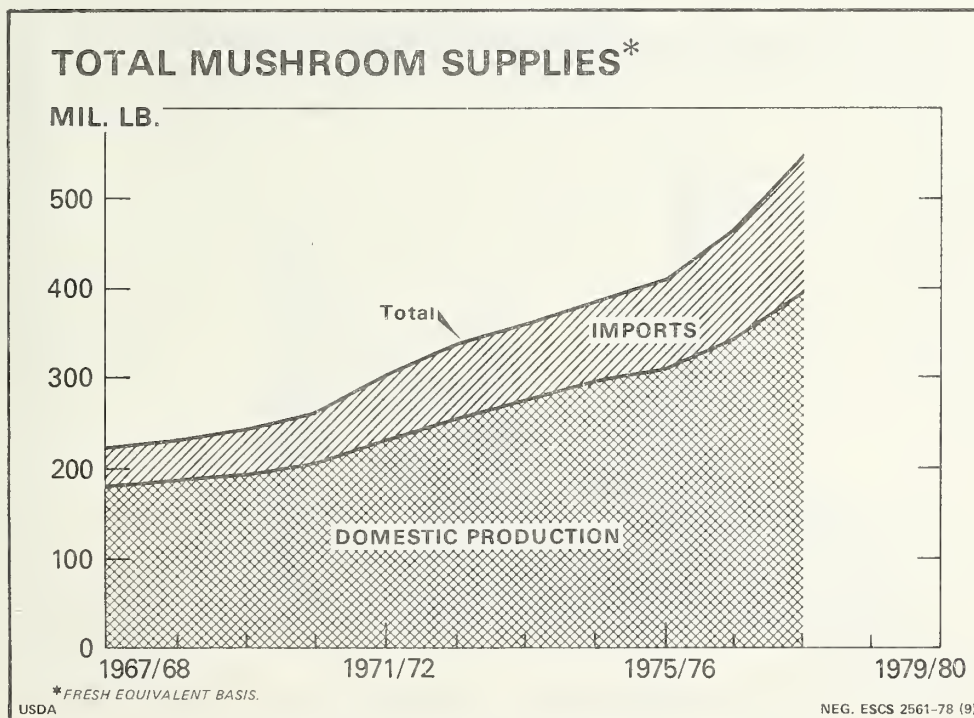
Domestic processed mushroom use also gained during 1977/78 though progress was less spectacular. Processor use gained 6 percent, accounting for 208 million pounds canned (135 million pounds

Mushrooms: Production, use, and value

Season	Output	Processing use	Fresh market use	Farm value
	Million pounds			Mn \$
1970/71 .....	207	149	58	89.6
1971/72 .....	231	165	66	106.9
1972/73 .....	254	177	77	110.0
1973/74 .....	279	177	102	123.4
1974/75 .....	299	173	126	147.2
1975/76 .....	310	168	142	191.1
1976/77 .....	347	196	151	255.7
1977/78 .....	399	208	191	307.6

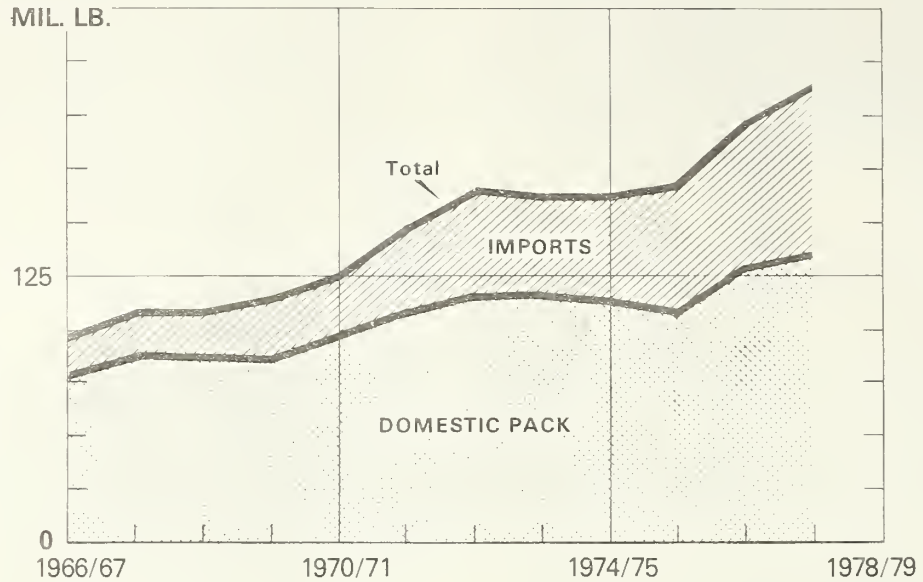
product weight), or canned as soup. This figure would also include small quantities dried and frozen as well. The grower's average price received for processing mushrooms was 65.2¢ per pound. This price compares with 66.9¢ a year earlier. This is the first weakness in mushroom prices to show up in recent years. It showed some erosion in the competitive position of domestic canners.

The International Trade Commission, in their domestic canning pack monitoring program, noted that 94.6 million pounds (product drained weight) were canned this past season. Although the processed use gained 6 percent according to the USDA report, the ITC report noted a decline from 101.5 million pounds a year earlier. This suggests that other processing uses—soups, dried and frozen products—probably accounted for more of the



## PROCESSED MUSHROOM SUPPLIES\*

MIL. LB.



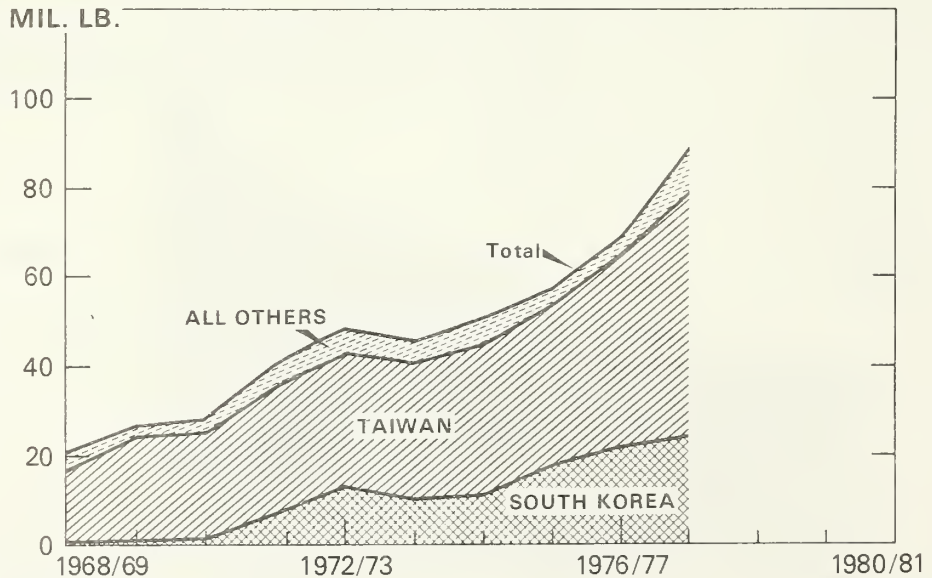
\*PRODUCT WEIGHT BASIS.

USDA

NEG. ESCS 2562-78 (9)

## CANNED MUSHROOM IMPORTS TO USA\*

MIL. LB.



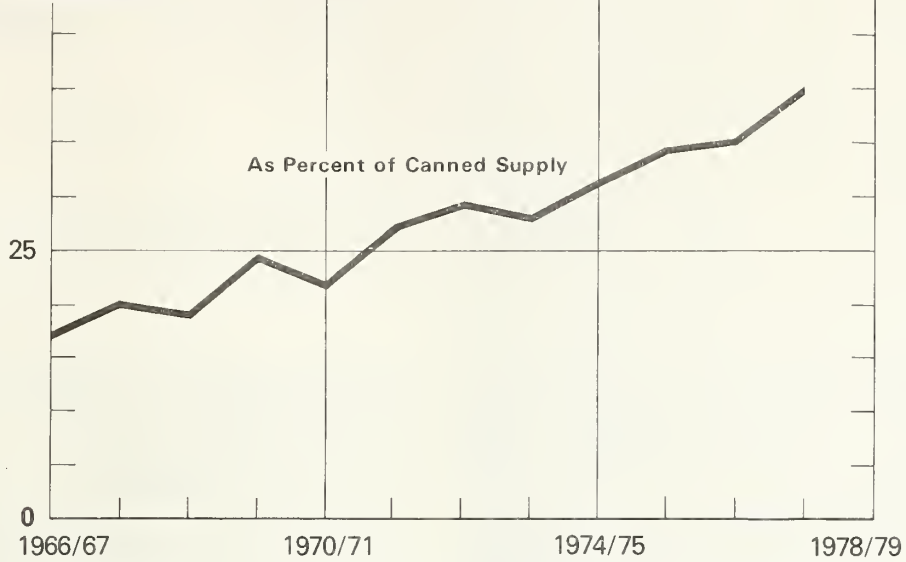
\*PRODUCT WEIGHT BASIS.

USDA

NEG. ESCS 2560-78 (9)

## CANNED MUSHROOM IMPORTS\*

PERCENT



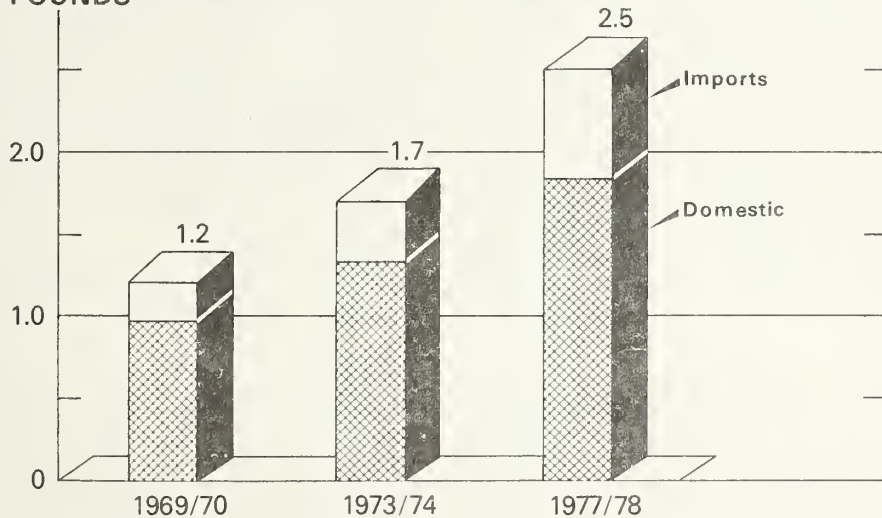
USDA

\*PRODUCT WEIGHT.

NEG. ESCS 2564-78 (9)

## MUSHROOM DISAPPEARANCE PER CAPITA\*-UNITED STATES

POUNDS



\*FRESH WEIGHT BASIS.

USDA

NEG. ESCS 2563-78 (9)



domestic processing activity during 1977/78. The same ITC report noted that total canned consumption moved to 191 million pounds, nearly one pound per person. Therefore, it required 92 million pounds of canned imports in addition to the domestic sales to add up to this figure.

There are three ways to measure the foreign share of the U.S. mushroom market. But first, per capita use of all mushrooms in 1977/78 advanced to 2.5 pounds per person on a raw weight equivalent. Figuring on this basis, imports equal to 0.7 pound per person accounted for 28 percent of all mushrooms consumed. However, imports may be considered as accounting for 40 percent of the total supply of processed mushrooms used in 1977/78. Or, as the International Trade Commission noted, the ratio of canned imports to total canned mushroom consumption advanced to 48 percent last season. But, by any of the three calculations, imports of canned mushrooms rose substantially, and the domestic canners are showing great concern about their markets once again.

Looking ahead to 1978/79, mushroom growers in the United States expect to increase production area by 11 percent, capitalizing on the strong fresh market demand. If growers carry out these plans, first bed fillings would be up 3 percent, second by 4 percent, and with additional fillings up a fourth.

## DRY EDIBLE BEANS

The dry bean crop prospect declined once again during the month of September. The drop was not severe, and the current estimate calls for a relatively large 18.6 million cwt. The current crop is still 14 percent more than last year. In general, there are larger crops of both white and colored classes of beans, but total lima bean output from California is slightly less. Prospective yields for all major California varieties declined during September, with large limas showing the largest cut. In Michigan, a rainy spell late in September reduced yield prospects there though the crop did experience very favorable harvest conditions earlier in that month. Late season rains affected Idaho harvesting activity, and modest yield reductions showed up in Washington and Wyoming.

The average price received by growers for beans moved downward between February and September. In view of the smaller October crop estimate, prices partially recovered, moving from \$14.60 per cwt. in September to \$16.20 in October.

Among the major classes, dealer prices for Michigan pea beans seemed to set the pattern of all bean prices during 1977/78. With the short crop

DRY BEANS : U.S. GROWER PRICES\*



from Ontario in 1977, the United Kingdom purchased heavily from Michigan sources early in the selling season. Prices were highest then, and supplies of the better grades were scarce until the recent new crop harvest began. Exports of this class were more than double those of a year earlier. For 1978/79 a slower pace of exports is to be expected.

Pinto bean prices followed the pattern of pea beans, but since late September, there has been moderate recovery. Dealer quotes as low as \$17.25 for U.S. No. 1's bagged and cleaned were reported in early September, but by mid-October, the price had advanced by more than \$2.00 per cwt. to \$20.25. This gain was prompted by reduced crop prospects. In addition, some pintos in Idaho were frost-damaged. Growers are, for the moment at least, tight holders of new crop beans. Domestic demand currently is routine.

Export activity of the major bean classes the past year has been fairly strong, spearheaded by the purchases of pea beans by the United Kingdom. Season exports (Sept. 1, 1977-Aug. 31, 1978) were 1.7 million cwt. compared with 788,071 cwt. the year before. Great northern, pinto, and kidney bean exports lagged those of a year earlier by substantial margins. Nonetheless, total exports of dry beans (including seed beans and blackeye peas) for 1977/78 totaled 4.5 million cwt., up from 4.0 a year earlier.

Export prospects for 1978/79 are not clear at this time, as no unusual shortages have been noted thus far. With Ontario having a more normal sized crop to export to the United Kingdom this year, total U.S. pea bean exports may fall below a year earlier. However, the Ontario Bean Marketing Board has been involved in a legal dispute and has not yet made any new crop sales. Thus, in September and October, Michigan export sales have been well above last year. A large crop of Argentina-grown alubia beans, a variety comparable to the U.S. great northrens, is competing with



our potential sales to Europe. The Mexican crop is not known at this time, so present prospects suggest that their foreign trade will be of routine character. Mexico normally imports and exports moderate quantities, even though that country is largely self-sufficient.

## DRY PEAS

Supplies of dry peas are now sharply larger with production in Idaho and Washington at 3.4 million cwt. This compares with the heat-damaged 1.0-million-cwt. crop of 1977, and the 2.2 million cwt. harvested in 1976.

The 1978 lentil crop is also larger with 1.4 million cwt. compared with 298,000 cwt. earlier. Some rain damage prior to harvest completion reduces the final 1978 figures for both peas and lentils.

Current prices reflect the relatively large crop to market. Mid-October grower prices for greens U.S. No. 1 f.o.b. warehouse were \$6.90 per cwt., the lowest since 1972/73. Yellows were \$6.75 for comparable quality. Lentils were bringing \$16.35 versus \$40.00 a year earlier.

According to the Pacific Northwest Pea Dealers Association, domestic use of dry peas during 1977/78 advanced to 760,220 cwt. from 667,980 a

## DRY PEAS : U.S. GROWER PRICES\*



year earlier. Lentil use fell to 153,910 cwt. from 195,470 in 1976/77. With the tight supply situation, export sales dropped sharply. The Census reported 800,000 cwt. of peas exported less seed compared with 1.8 million cwt. a year earlier, with seed. Combined domestic and export use easily exceeded 1977 domestic production. Lentil exports were less than 200,000 cwt. against nearly 800,000 the previous year.

With sharply larger supplies to move, export sales volume may be expected to reach more usual levels once again. Prices to growers will be sharply lower in the current marketing season.

Table 1—Harvested acreage and production of commercial vegetables for processing

Commodity	Harvested acreage			Production			
	1976	1977 <sup>1</sup>	For harvest 1978 <sup>1</sup>	1976	1977 <sup>1</sup>	Indicated 1978 <sup>1</sup>	1978 as percentage of 1977
	1,000 acres			1,000 tons			Percent
Beans, lima .....	48.0	60.3	68.0	55.8	74.2	84.9	114
Beans, snap .....	237.2	237.8	265.9	590.7	629.6	687.0	109
Beets .....	14.5	13.5	17.6	157.4	199.4	239.8	120
Corn, sweet .....	461.0	447.3	439.4	2,233.1	2,345.5	2,437.7	104
Peas, green .....	393.0	352.2	372.0	513.2	491.6	513.4	104
Spinach (winter and spring) .....	20.4	18.7	18.0	153.0	143.1	128.0	89
Tomatoes .....	309.0	338.6	292.8	6,471.8	7,651.6	6,547.6	86
Total with production <sup>2</sup> .....	1,483.1	1,468.4	1,473.7	10,175.0	11,535.0	10,628.3	92
Cabbage for Kraut .....	11.5	9.1	N.A.	232.0	208.1	220.2	106
Cucumbers for pickles .....	128.4	107.2	N.A.	633.8	548.6	N.A.	N.A.
Spinach (fall) .....	1.7	1.4	N.A.	8.0	8.9	N.A.	N.A.
Total 9 vegetables <sup>2</sup> .....	1,624.6	1,586.1	N.A.	11,048.8	12,300.6	N.A.	N.A.

<sup>1</sup> Contract. <sup>2</sup> May not add to total due to rounding. N.A.—Not available.

Vegetable, ESCS, USDA, issued monthly.

Table 2— Fall potatoes: Production by areas, United States

Year	8 Eastern States	8 Central States	8 <sup>3</sup> Western States	Fall total <sup>1</sup>
<i>Million cwt.</i>				
1971 .....	64	62	140	267
1972 .....	51	55	142	249
1973 .....	49	56	148	254
1974 .....	60	66	163	289
1975 .....	48	55	175	278
1976 .....	51	57	199	307
1977 .....	50	68	189	307
1978 <sup>2</sup> .....	47	68	197	312

<sup>1</sup> May not add to total due to rounding. <sup>2</sup> Indicated as of October 1. <sup>3</sup> Nine states beginning 1974.

Data from Crop Production, ESCS, USDA, annual and monthly reports.

Table 3— Sweetpotatoes: Production by areas, United States

Area	1972	1973	1974	1975	1976	1977 <sup>1</sup>	1978 <sup>2</sup>
<i>1,000 cwt.</i>							
Central Atlantic <sup>3</sup> ...	1,296	1,529	1,527	1,523	1,456	1,200	1,375
Lower Atlantic <sup>4</sup> ...	4,414	4,124	4,633	5,135	5,213	5,159	6,049
Central <sup>5</sup> .....	5,706	5,575	6,073	5,545	5,585	4,866	4,967
California .....	754	928	1,106	1,022	1,178	1,170	1,360
Total .....	12,170	12,156	13,339	13,225	13,432	12,395	13,751

<sup>1</sup> Preliminary. <sup>2</sup> Indicated. <sup>3</sup> New Jersey, Maryland and Virginia. <sup>4</sup> North Carolina, South Carolina, and Georgia. <sup>5</sup> Tennessee, Alabama, Mississippi, Arkansas, Louisiana, and Texas.

Data from Crop Production, ESCS, USDA, annual and monthly reports.

Table 4— Dry edible beans: Production by areas, United States<sup>1</sup>

Year	Michigan	New York	Northwest <sup>2</sup>	Southwest <sup>3</sup>	California	Other <sup>4</sup>	U.S. total <sup>5</sup>
<i>Million cwt.</i>							
1972 .....	7.0	.3	6.4	1.8	2.5		18.0
1973 .....	5.1	.4	6.3	1.7	2.7	.1	16.3
1974 .....	6.9	.5	7.1	1.7	4.0	.1	20.3
1975 .....	4.7	.5	7.4	2.0	2.6	.2	17.4
1976 .....	5.4	.4	7.2	1.9	2.8	.1	17.8
1977 .....	5.5	.4	6.0	1.4	2.9	.1	16.3
1978 <sup>6</sup> .....	5.7	.5	7.3	1.7	3.4	---	18.6

<sup>1</sup> Cleaned basis. <sup>2</sup> Minnesota, North Dakota, Nebraska, Montana, Idaho, Wyoming, and Washington. <sup>3</sup> Kansas, Colorado, New Mexico, and Utah. Beginning 1973 New Mexico discontinued. <sup>4</sup> Discontinued beginning 1978. <sup>5</sup> May not add to total due to rounding. <sup>6</sup> Indicated.

Data from Crop Production, ESCS, USDA, annual and monthly reports.

Table 5—Average retail price of specified fresh and canned items, by months, 1976 to date

Item and year	Jan.	Feb.	March	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
<i>Cents</i>												
<b>FRESH</b>												
Onions (pound)												
1976.....	25.2	25.3	23.2	24.1	25.5	24.2	23.0	23.3	21.7	20.8	20.2	21.2
1977.....	21.9	31.0	33.2	42.3	40.0	32.1	30.6	27.8	23.5	22.1	21.5	22.6
1978.....	21.5	21.7	21.6	25.5	28.2	27.0						
Cabbage (pound)												
1976.....	18.7	18.2	16.7	16.4	15.9	15.7	14.7	14.6	14.2	15.0	15.3	20.2
1977.....	23.8	41.8	37.8	35.1	29.2	20.6	16.5	15.5	15.0	16.6	21.7	21.7
1978.....	19.9	24.7	26.0	25.2	24.3	29.5						
Celery (pound)												
1976.....	39.1	36.6	31.0	27.2	30.5	30.0	29.3	29.1	26.4	27.5	28.3	39.5
1977.....	33.9	43.0	43.8	34.4	35.6	34.3	32.2	30.9	28.5	29.6	31.4	30.7
1978.....	32.3	32.6	37.7	38.6	43.4	51.7						
Lettuce (head)												
1976.....	43.7	39.2	38.2	40.7	44.9	40.7	41.7	57.0	53.9	70.1	59.0	43.3
1977.....	46.8	48.4	43.2	46.6	41.4	45.4	44.0	43.6	51.6	53.6	49.5	56.8
1978.....	50.6	64.8	50.1	58.8	102.8	80.5						
Tomatoes (pound)												
1976.....	60.5	54.2	57.4	66.2	60.3	52.6	62.2	46.4	47.4	59.5	61.7	65.0
1977.....	62.4	82.6	70.9	90.0	77.3	57.6	54.5	64.7	58.4	59.6	63.1	72.7
1978.....	72.1	56.8	70.2	63.5	89.4	65.2						
<b>CANNED</b>												
Peas (No. 303 can)												
1976.....	38.6	38.6	38.4	38.4	38.4	37.9	38.2	38.7	38.8	38.9	39.2	39.2
1977.....	38.0	38.4	38.3	38.1	38.4	38.8	38.7	38.4	38.4	37.8	38.0	38.2
1978.....	37.9	38.2	37.3	37.4	37.6	38.8						
Tomatoes (No. 303 can)												
1976.....	35.5	35.1	35.1	35.0	34.9	34.4	34.8	34.9	35.0	35.3	35.1	35.9
1977.....	35.9	36.3	36.7	37.1	37.7	38.3	38.1	38.3	38.3	38.2	38.1	38.4
1978.....	37.6	38.4	38.1	37.8	38.2	38.0						
<b>POTATOES</b>												
Tablestock (10 lbs.)												
1976.....	139.4	156.2	154.1	159.8	166.0	177.1	162.0	146.7	127.5	119.7	119.9	122.4
1977.....	120.9	142.0	144.8	148.2	166.5	197.4	186.1	161.6	136.2	129.2	131.6	132.2
1978.....	129.0	130.5	132.9	134.7	141.1	171.6						
Frozen French Fries (9 oz. pkg.)												
1976.....	27.0	27.1	26.9	27.4	27.4	27.5	27.4	27.7	27.8	27.8	27.9	27.7
1977.....	27.6	27.2	27.6	28.0	27.7	27.9	27.7	27.8	28.4	28.7	29.3	29.5
1978.....	30.1	30.0	29.9	30.6	30.6	30.4						
Inst. Mashed (7 oz. pkg.)												
1976.....	55.8	56.2	55.6	56.3	56.6	56.9	57.0	57.0	57.2	57.3	57.4	57.2
1977.....	56.9	56.9	57.1	57.1	57.3	57.2	57.2	57.8	57.9	58.1	58.3	58.7
1978.....	58.6	58.6	58.5	58.5	58.7	58.9						

Retail prices, Bureau of Labor Statistics, U.S. Department of Labor.

NOTE: DATA DISCONTINUED AS OF JULY 1, 1978.

Table 6—Vegetables and melons for fresh market: Commercial acreage and production of principal crops, selected seasons, 1976, 1977, and indicated 1978

Seasonal group and crop	Acreage for harvest				Production			
	1976	1977	1978		1976	1977	1978	
			Indi- cated	Percent- age of 1977			Indi- cated <sup>1</sup>	Percent- age of 1977
	<i>1,000 acres</i>		<i>Percent</i>		<i>1,000 cwt.</i>		<i>Percent</i>	
Winter .....	183.2	150.4	178.2	118	34.3	29.1	33.1	114
Spring .....	381.0	390.0	369.1	95	60.2	61.3	60.7	99
Summer .....	550.1	490.7	511.0	104	70.4	66.9	68.3	102
Fall: <sup>2</sup>								
Beans, snap .....	16.4	18.9	20.3	107	.7	.7	.8	114
Broccoli <sup>3</sup> .....	16.6	20.8	19.3	93	1.2	1.6	1.4	89
Cabbage <sup>3</sup> .....	30.0	28.1	29.4	105	8.1	8.1	8.0	100
Cantaloups .....	4.4	3.4	6.3	188	.5	.4	.7	197
Carrots <sup>3</sup> .....	21.8	21.2	26.2	124	7.0	6.9	8.2	120
Cauliflower <sup>3</sup> .....	14.2	15.1	17.9	119	1.3	1.7	1.9	110
Celery <sup>3</sup> .....	9.8	9.3	9.0	97	5.1	4.7	4.6	98
Corn, sweet .....	15.9	16.4	15.4	94	1.3	1.1	1.1	96
Cucumbers .....	14.2	15.5	15.7	101	1.2	1.4	1.4	97
Eggplant .....	.8	1.0	1.0	100	.2	.2	.2	100
Escarole .....	1.8	1.8	1.7	96	.2	.2	.2	100
Honeydew melons .....	1.2	1.0	1.2	119	.2	.2	.2	108
Lettuce .....	57.0	60.7	59.9	99	12.8	13.7	13.6	99
Peppers, green <sup>3</sup> .....	12.4	14.5	14.6	101	1.4	1.6	1.7	105
Spinach .....	2.3	2.3	2.4	104	.1	.2	.2	84
Tomatoes .....	21.2	23.4	25.6	109	4.8	4.9	5.6	113
Total fall to date <sup>4</sup> .....	239.9	253.3	265.8	105	46.2	47.7	49.9	104
Total acreage and production reported to date <sup>4</sup> .....	1,354.2	1,284.4	1,324.1	103	211.1	205.0	212.0	103

<sup>1</sup> Based on average yield per acre. <sup>2</sup> October, November, and December. <sup>3</sup> Includes fresh market and processing. <sup>4</sup> May not add due to rounding.

Vegetables-Fresh Market, ESCS, USDA, issued monthly.



**Table 7—Vegetables, fresh: Representative prices (wholesale lots) at New York and Chicago for stock of generally good quality and condition (U.S. No. 1 when available), indicated periods 1977 and 1978**

Market and commodity	State of origin	Unit	Tuesday			
			1977		1978	
			Sept. 13	Oct. 4	Sept. 12	Oct. 3
<i>Dollars</i>						
New York						
Beans, snap, green						
round green . . . . .	New Jersey	Bu. bskt.	6.50	8.25	8.25	---
Broccoli . . . . .	California	14's,crt.	7.25	6.75	9.60	8.00
Cabbage, domestic						
round type . . . . .	New Jersey	Various crates	3.12	3.25	4.15	3.75
Cantaloups . . . . .	California	Jumbo crt. 36's	15.50	17.00	20.00	---
Carrots, topped						
washed . . . . .	California	48 1-lb. film bag, ctn.	8.50	8.50	11.25	10.50
Cauliflower . . . . .	Long Island	Crt. 12's	---	---	---	9.50
Celery, Pascal . . . . .	New York	2-3 doz.	---	---	11.00	---
Celery, Pascal . . . . .	California	2-3 doz.	7.50	7.25	14.50	11.50
Corn, sweet . . . . .	New York	5 doz. crate	3.25	3.25	4.00	4.25
Cucumbers . . . . .	Virginia	Bu. bskt.	---	---	---	7.50
Lettuce, Iceberg . . . . .	California	2 doz. cnt.	8.75	9.50	6.25	7.75
Onions, yellow Spanish						
large . . . . .	Idaho—Oregon	50 lb. sack	---	5.00	6.25	5.75
Onions, yellow globe						
medium . . . . .	New York	50 lb. sack	2.62	4.00	4.50	3.75
Spinach, savory . . . . .	New Jersey	Bu. bskt.	---	6.50	---	---
Chicago						
Beans, snap, green						
round green . . . . .	Illinois	Bu. hamper	6.25	10.00	8.00	11.00
Broccoli . . . . .	California	14's crt.	7.25	7.10	9.75	8.25
Cabbage, domestic						
round type . . . . .	Illinois	Various crates	3.35	---	4.00	3.75
Cantaloups . . . . .	California	Jumbo crt., 36's	11.75	---	---	7.00
Cauliflower . . . . .	California	Ctns., film wrpd., 12's	8.25	8.25	8.50	9.00
Celery, Pascal . . . . .	Michigan	2-4 doz.	6.40	6.00	11.25	9.75
Cucumbers . . . . .	Illinois	Bu. bskt.	7.00	6.75	9.50	11.00
Green Peppers . . . . .	Illinois	Bu. bskt., lge.	7.00	---	9.50	10.00
Honeydews . . . . .	California	Crts., 5-8's	4.15	4.50	5.50	5.75
Lettuce, Iceberg . . . . .	California	2 doz. ctn.	7.00	9.45	6.50	6.75
Onions, yellow Spanish						
large . . . . .	Idaho—Oregon	50 lb. sack	4.60	4.85	5.25	---
Onions, yellow globe						
medium . . . . .	Midwestern	50 lb. sack	---	---	---	---
Spinach, flat type . . . . .	Illinois	Bu. bskt.	---	---	---	---
Tomatoes, green, ripens						
and turning, med-lge. . . . .	California	2 lyr. Lug	---	---	7.50	7.50

Weekly Summary of Terminal Market Prices, AMS, USDA.

Market News Reports.

**Table 8—Vegetables, commercial for fresh market: Index numbers (unadjusted) of prices received by farmers, United States by months, 1963 to date<sup>1</sup>**

(1967=100)													
Period	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Average
1963 .....	102	95	82	83	78	88	85	65	62	70	91	94	83
1964 .....	100	103	98	89	83	90	80	76	76	78	101	87	88
1965 .....	78	83	97	107	127	103	84	77	78	87	89	87	91
1966 .....	110	115	101	108	94	99	115	102	91	92	101	95	102
1967 .....	100	94	96	110	104	128	109	84	80	88	101	104	100
1968 .....	119	117	125	129	105	98	92	86	92	91	113	118	107
1969 .....	104	109	113	110	118	97	97	94	90	111	151	130	110
1970 .....	130	123	123	109	121	110	101	96	111	95	102	95	110
1971 .....	111	116	149	135	126	127	119	101	99	121	172	138	126
1972 .....	155	131	115	134	122	123	116	125	129	112	147	139	129
1973 .....	155	154	170	200	190	190	179	131	125	122	127	129	156
1974 .....	136	162	131	151	170	171	151	140	140	163	167	146	152
1975 .....	169	169	166	177	169	204	178	157	159	159	174	189	173
1976 .....	191	163	179	177	130	156	169	153	177	190	186	172	170
1977 .....	235	260	270	216	182	150	169	160	168	183	210	163	197
1978 <sup>2</sup> .....	207	201	209	296	247	251	220	172	179	173			

<sup>1</sup> All prices reported on f.o.b. basis. <sup>2</sup> Preliminary.

**Table 9—Canned vegetables: Commercial packs 1976 and 1977 and canners' and wholesale distributors' stocks 1977 and 1978 by commodities, United States**

Commodity	Pack		Stocks					
	1976	1977	Canners			Wholesale distributors <sup>1</sup>		
			Date	1977	1978	Date	1977	1978
	1,000 cases 24/303's							
Major commodities								
Beans, snap . . . . .	47,421	54,494	July 1	5,695	5,001	July 1	3,554	3,570
Beets . . . . .	9,164	11,348	July 1	2,585	2,153	July 1	1,012	969
Corn, sweet . . . . .	54,694	56,300	July 1	9,675	7,584	July 1	3,933	4,108
Peas, green . . . . .	31,927	30,238	June 1	7,737	4,374	June 1	2,821	2,756
Sauerkraut . . . . .	12,531	12,447	Aug. 1	2,932	2,324	July 1	655	624
Total . . . . .	155,737	164,827		28,624	21,436		11,975	12,027
Tomato items								
Tomatoes . . . . .	42,805	54,124	July 1	9,431	16,043	July 1	4,518	4,473
Tomato juice . . . . .	32,154	27,197	July 1	8,795	5,544	July 1	2,292	2,152
Total . . . . .	74,959	81,321		18,226	21,587		6,810	6,625
Other commodities								
Asparagus . . . . .	3,609	3,705	Mar. 1	308	615	Apr. 1	291	391
Beans, lima . . . . .	2,812	2,657	Aug. 1	654	290	July 1	N.A.	N.A.
Field peas . . . . .	1,875	2,223						
Carrots . . . . .	5,327	5,973	July 1	1,771	2,113	July 1	686	672
Okra <sup>3</sup> . . . . .	367	485						
Pickles . . . . .	70,986	70,347						
Pimientos . . . . .	702	407						
Pumpkin and squash .	5,500	2,962	July 1	2,588	1,753	July 1	515	343
Potatoes . . . . .	6,201	7,126						
Sweetpotatoes . . . . .	7,960	7,194						
Spinach . . . . .	6,304	7,108	Mar. 1	2,818	2,249	Apr. 1	389	651
Other greens . . . . .	3,125	3,022						
Total comparable other items . . . . .	114,768	113,209		8,139	7,020		1,881	2,057
Grand total comparable items . . .	345,464	359,357		54,989	50,043		20,666	20,709

<sup>1</sup> Converted from actual cases to standard cases of 24 No. 303 cans. <sup>2</sup> Includes combination vegetable juices containing at least 70 percent tomato juice. <sup>3</sup> Okra, okra and tomatoes, and okra, corn, and tomatoes. N.A.—not available.

Canners' stock and pack data from the National Food Processors Association pickles and sauerkraut pack ESCS derived, sauerkraut stocks National Kraut Packers Assoc. derived. Wholesale distributors' stock from the Bureau of Census.

**Table 10—Vegetables, frozen: United States commercial packs 1976 and 1977, and cold storage holdings, October 1, 1977 with comparisons**

Commodity	Packs		Cold storage holdings		
	1976	1977	Oct. 1, 1976	Oct. 1, 1977	Oct. 1, 1978 <sup>1</sup>
----- Million pounds -----					
Asparagus . . . . .	24	22	16	15	10
Beans, lima:					
Fordhook . . . . .	25	45	27	23	32
Baby . . . . .	44	92	65	45	55
Total . . . . .	69	137	92	68	87
Beans, snap:					
Regular cut . . . . .	114	142	125	120	142
French cut . . . . .	60	83	56	55	71
Wax . . . . .	7	6	N.A.	N.A.	N.A.
Total . . . . .	181	231	181	175	213
Broccoli . . . . .	202	314	58	92	93
Brussels sprouts . . . . .	45	57	22	14	11
Carrots . . . . .	181	264	52	57	78
Cauliflower . . . . .	68	97	37	23	50
Corn, cut . . . . .	282	261	232	256	243
Corn-on-cob . . . . .	188	265	127	187	233
Mixed vegetables . . . . .	( <sup>2</sup> )	( <sup>2</sup> )	29	27	33
Mushrooms . . . . .	6	10	N.A.	N.A.	N.A.
Onions . . . . .	149	153	24	23	24
Peas . . . . .	340	334	374	319	338
Peas and carrots . . . . .	( <sup>2</sup> )	( <sup>2</sup> )	10	9	11
Pumpkin and squash . . . . .	22	25	N.A.	N.A.	N.A.
Rhubarb . . . . .	8	9	N.A.	N.A.	N.A.
Southern greens <sup>3</sup> . . . . .	68	82	27	24	28
Spinach . . . . .	160	168	94	84	60
Okra . . . . .	28	42	28	45	52
Peas, blackeye . . . . .	31	36	14	13	15
Miscellaneous vegetables . . . . .	104	116	170	171	197
Total <sup>4</sup> . . . . .	2,156	2,623	1,586	1,602	1,776
French fried potatoes . . . . .	2,876	3,119	468	518	560
Other frozen potatoes <sup>5</sup> . . . . .	459	504	94	93	91
Total frozen potatoes . . . . .	3,335	3,623	562	611	651
Grand total <sup>4</sup> . . . . .	5,491	6,246	2,148	2,213	2,427

<sup>1</sup> Preliminary. <sup>2</sup> Included in miscellaneous vegetables. <sup>3</sup> Includes collards, kale, mustards, turnip greens/turnips. <sup>4</sup> May not add due to rounding. N.A.=not available.

Pack data from American Frozen Food Institute. Stocks from Cold Storage Report, ESCS, USDA, issued monthly.



**Table 11—Vegetables, fresh: Average prices received by farmers, per hundredweight, United States, September 15, 1978 with comparisons**

Commodity	1977		1978		
	August	September	July	August	September 1-15
	<i>Dollars</i>				
Beans, snap . . . . .	22.90	19.90	24.90	23.50	22.80
Broccoli . . . . .	20.50	20.30	---	---	---
Cabbage . . . . .	4.82	5.22	10.70	7.60	7.85
Cantaloups . . . . .	9.26	9.60	10.30	9.02	10.40
Carrots . . . . .	9.88	10.40	14.00	16.10	14.40
Cauliflower . . . . .	25.50	24.60	---	---	---
Celery . . . . .	6.65	7.21	16.30	11.50	15.00
Corn, sweet . . . . .	6.52	7.42	10.30	7.63	7.45
Cucumbers . . . . .	11.60	9.63	13.70	9.85	11.40
Lettuce . . . . .	7.09	8.24	8.10	5.61	7.03
Onions . . . . .	6.88	6.40	10.40	9.24	7.48
Peppers, green . . . . .	14.90	14.90	22.00	16.00	17.80
Spinach . . . . .	18.30	18.30	---	---	---
Tomatoes . . . . .	20.70	20.10	23.90	15.20	16.70
Watermelons . . . . .	3.25	3.30	3.88	4.00	4.01

Agricultural Prices, ESCS, USDA. issued monthly.

**Table 12—Fresh and Processed Vegetables: Retail price, marketing margin, and farm value per unit, sold in New York City, indicated months, 1977 and 1978**

Commodity, month, and retail unit	Retail <sup>1</sup> price	Marketing margin		Farm value <sup>2 3</sup>	
		Absolute	Percentage of retail value	Absolute	Percentage of retail value
		<i>Cents</i>	<i>Percent</i>	<i>Cents</i>	<i>Percent</i>
<b>Fresh:</b>					
Carrots (Pound)					
July 1978 . . . . .	39.0	23.0	59	16.0	41
June 1978 . . . . .	31.9	23.3	73	8.6	27
July 1977 . . . . .	30.6	22.0	72	8.6	28
Celery (Pound)					
July 1978 . . . . .	47.0	24.6	52	22.4	48
June 1978 . . . . .	53.3	31.6	59	21.7	41
July 1977 . . . . .	34.7	27.9	79	7.3	21
Lettuce (Head)					
July 1978 . . . . .	69.0	53.1	77	15.9	23
June 1978 . . . . .	86.6	36.2	42	50.4	58
July 1977 . . . . .	52.3	42.9	82	9.4	18
Onions, dry yellow (Pound)					
July 1978 . . . . .	29.0	21.9	76	7.1	24
June 1978 . . . . .	27.8	21.2	76	6.6	24
July 1977 . . . . .	34.1	26.7	78	7.4	22
<b>Processed:<sup>4</sup></b>					
Beets, sliced canned (303 can)					
June 1978 . . . . .	38.4	36.3	94	2.1	5
March 1978 . . . . .	38.5	36.4	94	2.1	6
June 1977 . . . . .	35.5	33.4	94	2.1	6
Sauerkraut, canned (303 can)					
June 1978 . . . . .	30.6	28.3	93	2.3	8
March 1978 . . . . .	32.2	29.9	93	2.3	7
June 1977 . . . . .	31.8	29.4	92	2.4	8
Tomatoes, canned (303 can)					
July 1978 . . . . .	53.0	48.2	91	4.8	9
April 1978 . . . . .	37.9	33.1	87	4.8	13
July 1977 . . . . .	39.6	34.8	88	4.8	12

<sup>1</sup> Retail prices BLS prior to July 1978, July 1978 Division of Markets, State Department of Agriculture and Markets, NY. <sup>2</sup> For quantity of product equivalent to retail unit sold to consumers: Because of waste and spoilage during marketing, equivalent quantity exceeds retail unit. Fresh: F.o.b. shipping point price, Processed: Equivalent packing housedoor returns. <sup>3</sup> Production areas; Carrots-California, Celery-California, Lettuce-California, Onions-Texas, Canned Beets-New York, Frozen F.F. Potatoes-Idaho, Maine, and Washington, Canned Sauerkraut-New York, Canned Tomatoes-Eastern States. <sup>4</sup> Priced quarterly.

Table 13—Potatoes, white: Acreage, yield per acre, and production, annual 1976, 1977, and indicated 1978

Season group	Acreage			Yield per acre			Production		
	Harvested		For harvest 1978	1976	1977 <sup>1</sup>	Indicated 1978	1976	1977 <sup>1</sup>	Indicated 1978
	1976	1977 <sup>1</sup>							
	1,000 acres			cwt.			1,000 cwt.		
Winter .....	14.4	13.4	12.9	207	199	203	2,984	2,660	2,621
Spring .....	98.4	91.4	90.7	251	250	199	24,722	22,870	18,028
Summer .....	118.7	115.2	112.2	190	191	187	22,541	21,982	21,013
Fall .....									
8 Eastern .....	199.9	197.9	202.2	254	252	233	50,734	49,836	47,072
8 Central .....	301.8	322.3	313.3	191	210	216	57,718	67,772	67,724
9 Western .....	641.3	618.5	630.9	310	306	313	198,975	189,456	197,222
Total .....	1,143.0	1,138.7	1,146.4	269	270	272	307,427	307,064	312,018
United States .....	1,374.5	1,358.7	1,362.2	260	261	260	357,674	354,576	353,680

1Revised.

Crop production, ESCS, USDA, issued monthly.

Table 14—Potatoes: Prices f.o.b. shipping points, per hundredweight, U.S. No. 1 grade or better, indicated periods, 1977 and 1978

Shipping point and variety	1977			1978		
	August 13	September 10	October 15	August 12	September 9	October 14
	<i>Dollars</i>					
New Jersey Round whites .....	---	3.85	4.23	4.95	3.70	4.50
Long Island, N.Y., Round whites .....	---	3.82	4.36	5.80	3.88	4.38
Michigan Round whites .....	3.84	3.72	---	5.26	3.94	4.06
Minnesota Reds .....	2.75	3.25	3.93	8.33	4.37	4.19
Colorado Reds .....	---	4.38	5.00	10.25	8.50	5.13
Washington Norgolds .....	---	14.00	---	11.20	10.50	7.75
Washington Russets .....	---	---	10.08	---	---	---

F.O.B. prices are simple averages of the range of daily prices for the week ended on indicated date. Compiled from Market News Service reports.

Table 15—Potatoes: U.S. average price received by farmers, per hundredweight, indicated periods, 1977 and 1978

	1977			1978		
	July	August	September	July	August	September
	<i>Dollars</i>					
U.S. farm price .....	5.27	4.01	3.29	7.41	5.44	3.61
Parity price .....	5.78	5.76	5.75	6.34	6.33	6.40
	<i>Percent</i>					
Price as percent of parity .....	91	70	57	117	86	56

Agricultural Prices, ESCS, USDA, issued monthly.

**Table 16—Sweetpotatoes: Acreage, yield per acre, and production  
annual 1976, 1977, and indicated 1978**

	Acreage			Yield per acre			Production		
	Harvested		For harvest 1978	1976	1977	Indi- cated 1978	1976	1977	Indi- cated 1978
	1976	1977							
	1,000 acres			cwt.			1,000 cwt.		
Central Atlantic <sup>1</sup> .....	10.4	9.6	10.2	140	125	135	1,456	1,200	1,375
Lower Atlantic <sup>2</sup> .....	41.4	40.8	45.2	126	126	134	5,213	5,159	6,049
Central <sup>3</sup> .....	58.4	54.2	54.6	96	90	91	5,585	4,866	4,967
California .....	7.6	7.8	8.5	155	150	160	1,178	1,170	1,360
United States .....	117.8	112.4	118.5	114	110	116	13,432	12,395	13,751

<sup>1</sup> New Jersey, Maryland, and Virginia. <sup>2</sup> North Carolina, South Carolina, and Georgia. <sup>3</sup> Tennessee, Alabama, Mississippi, Arkansas, Louisiana, and Texas.

Crop Production, ESCS, USDA, issued monthly.

**Table 17—Sweetpotatoes: Prices f.o.b. shipping points and wholesale price (wholesale lots) at  
New York and Chicago, indicated periods 1977 and 1978**

Item	State	Unit	Week ended			
			1977		1978	
			Sept. 10	Oct. 8	Sept. 9	Oct. 7
F.o.b. shipping points:			<i>Dollars</i>			
Porto Rico type, uncured . . . . .	Eastern North Carolina points	U.S. no. 1 50 lb. crt.	---	---	---	---
Porto Rico type, uncured . . . . .	Southern Louisiana points	U.S. no. 1 50 lb. crt.	7.69	7.15	7.75	7.05
Porto Rico type, Garnet . . . . .	Stockton, California	40 lb. ctn.	---	8.40	--	9.30
			Tuesday			
			1977		1978	
			Sept. 13	Oct. 4	Sept. 12	Oct. 3
Terminal markets			<i>Dollars</i>			
New York Porto Rico, uncured . . . . .	North Carolina	50 lb. ctn.	9.25	---	---	---
Chicago Porto Rico, uncured . . . . .	Louisiana	50 lb. ctn.	---	---	9.00	7.50

F.o.b. prices are simple averages of the range of daily prices, compiled from Market News Service reports. The market prices are representative prices for Tuesday of each week and are submitted by the Market News Service representative at each market.



**Table 18—U.S. average price per hundredweight received by farmers for sweetpotatoes, dry edible beans, and dry field peas, indicated periods, 1977 and 1978**

Commodity	1977			1978		
	July	August	September	July	August	September
	<i>Dollars</i>					
Field crops:						
Sweetpotatoes .....	13.50	11.90	8.10	16.70	13.10	9.65
Beans, dry edible .....	16.50	16.20	13.80	17.60	17.10	14.60
Peas, dry field .....	11.50	18.40	17.10	9.07	7.89	7.16

Agricultural Price, ESCS, USDA, issued monthly.

**Table 19—Dry edible beans: Supply and disposition<sup>1</sup>**

Marketing season beginning September 1	Supplies				Utilization			
	Beginning stocks Sept.	Production	Imports <sup>2</sup>	Total	Domestic disappear- ance	Exports <sup>3</sup>	Total disappear- ance	Ending stocks Aug. 31
	<i>Million cwt.</i>							
Average								
1955-59 .....	1.6	17.5	.1	19.2	14.9	3.1	18.0	1.2
1960-64 .....	1.6	18.5	.1	20.2	15.7	2.7	18.6	1.6
1965 .....	1.2	16.5	.1	17.8	14.2	2.4	16.6	1.2
1966 .....	1.2	20.0	.1	21.3	15.3	3.8	19.1	2.2
1967 .....	2.2	15.2	.1	17.5	14.4	2.0	16.4	1.1
1968 .....	1.1	17.4	.1	18.6	14.4	2.7	17.1	1.5
1969 .....	1.5	18.9	.1	20.5	14.5	4.3	18.8	1.7
1970 .....	1.7	17.4	.1	19.2	14.2	3.3	17.5	1.7
1971 .....	1.7	15.9	.1	17.7	13.8	2.8	16.6	1.1
1972 .....	1.1	18.1	.2	19.4	14.0	3.9	17.9	1.5
1973 .....	1.5	16.4	.7	18.6	14.0	3.3	17.3	1.3
1974 .....	1.3	20.3	.1	21.7	14.5	5.1	19.6	2.1
1975 .....	2.1	17.4	.3	19.8	14.2	2.7	16.9	2.9
1976 .....	2.9	17.8	.2	20.9	13.9	4.0	17.9	3.0
1977 .....	3.0	16.3	.2	19.5	13.9	3.9	17.8	1.7
1978 <sup>4</sup> .....	1.7	18.6	.2	20.5				

<sup>1</sup> Source: ESCS, Bureau of the Census. <sup>2</sup> Imports include Garbanzos and all beans for seed purposes but exclude Mung Beans.

<sup>3</sup> Exports include Garbanzos, baked beans, all beans for seed purposes and donations to welfare agencies for foreign relief.

<sup>4</sup> Preliminary.

Table 20—Beans, dry edible: Acreage, yield per acre, and production, annual 1976, 1977, and indicated 1978<sup>1</sup>

Group, State and classes	Acreage			Yield per acre			Production <sup>1</sup>		
	Harvested		For harvest 1978	1976	1977	Indi- cated 1978	1976	1977	Indi- cated 1978
	1976	1977							
	1,000 acres			Pounds			1,000 cwt.		
Michigan . . . . .	545	480	545	1,000	1,150	1,050	5,450	5,520	5,723
New York . . . . .	37	32	43	1,070	1,100	1,100	396	352	473
Northwest <sup>3</sup> . . . . .	520	416	479	1,379	1,450	1,519	7,169	6,031	7,275
Southwest <sup>4</sup> . . . . .	210	164	194	889	859	897	1,866	1,409	1,741
California:									
Large lima . . . . .	35	31	29	1,490	1,690	1,700	522	523	493
Baby lima . . . . .	21	22	25	1,800	2,090	1,850	378	460	463
Other . . . . .	123	113	156	1,545	1,719	1,543	1,900	1,943	2,407
Total California . . . . .	179	166	210	1,564	1,763	1,601	2,800	2,926	3,363
Other States . . . . .	8	6	( <sup>5</sup> )	1,346	847	( <sup>5</sup> )	105	50	( <sup>5</sup> )
United States <sup>6</sup> . . . . .	1,499	1,263	1,471	1,186	1,290	1,263	17,786	16,288	18,575

<sup>1</sup> Includes beans grown for seed. <sup>2</sup> Cleaned basis. <sup>3</sup> Nebraska, Montana, Idaho, Wyoming, Washington, Minnesota, and North Dakota. <sup>4</sup> Kansas, Colorado, and Utah. <sup>5</sup> Estimates discontinued beginning 1978. <sup>6</sup> May not add due to rounding.

Crop Production, ESCS, USDA, issued monthly.

Table 21—Peas, dry field: Acreage, yield per acre, and production, annual 1976, 1977, and indicated 1978<sup>1</sup>

State	Acreage			Yield per acre			Production		
	Harvested		For harvest 1978	1976	1977	Indi- cated 1978	1976	1977	Indi- cated 1978
	1976	1977							
	1,000 acres			Pounds			1,000 cwt.		
Idaho . . . . .	48	67	76	1,720	840	1,750	826	563	1,330
Washington . . . . .	77	100	121	1,720	460	1,750	1,324	460	2,118
United States . . . . .	125	167	197	1,720	613	1,750	2,150	1,023	3,448

<sup>1</sup> In principal commercial producing States. Includes peas grown for seed and cannery peas harvested dry. <sup>2</sup> Cleaned basis.

Crop Production, ESCS, USDA, issued monthly.

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## RATES IN THE TRUCKING OF FRESH FRUITS AND VEGETABLES

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**ABSTRACT:** Truck rates for produce have increased less than half as much as rail rates since 1974, and appear to have decreased in some instances during the first half of 1978. The rates from most shipping points have changed in the same direction seasonally as have the volumes of produce traffic. Where rates remained stable over several seasons, truck shortages were reported to have developed.

Year-to-year patterns of rate changes appear to reflect some significant changes in trucking conditions that may have temporarily increased the overall supply of trucks available for hauling produce in 1975 and the first half of 1978.

**KEYWORDS:** Truck, rail, shipping rates, fruits, vegetables, shipping points.

The interstate trucking of fresh fruits and vegetables is not subject to economic regulation by the Interstate Commerce Commission (ICC). Rate information is not published on a regular basis. Beginning in January 1974, USDA arranged for the collection of exempt truck rates for movement of selected fruits and vegetables in selected corridors during the first week of each month. "Representative" rates were derived from these data and used for transportation cost components of price spreads for fruits and vegetables. Several rate series are published twice yearly in the *Fruit Situation* and the *Vegetable Situation*.

This article assesses the behavior of these representative rates. Rate trends are discussed first and then the frequency and patterns of rate changes are described. In each analysis it becomes evident that exempt truck rate behavior was not uniform over all commodities, shipping points, and markets during the period from January 1974 to August 1978.

### Produce Rates Peaked Sharply in July 1978

Continuing collection of these rates permits some assessment of trends in 1978. For matched series, rates in June 1978 were 1.1 percent above a

year earlier, but in July 1978 rates rose to 6.5 percent above July 1977.

For shipments from California shipping points, rates in early 1978 were below those of a year earlier. In February 1978, 13 rates were 6 percent below their previous levels. However, rates rose thereafter in 1978 in relation to year-earlier rates, and 29 July rates were 7 percent above the previous July.

At the time this article was prepared, only 14 California rates for August 1978 were available. These rates were 3 percent below the previous August, and 14 percent less than July 1978. Thus, California rates peaked sharply in July 1978 but appear to have returned in August to a "normal" seasonal pattern. News reports suggest that delayed and highly perishable crops in the Salinas-Watsonville area may have been partially responsible for this sharp July peak of rates in 1978.

### Truck Rates Increased Less Rapidly Than Rail Rates Over the Past Four Years

Representative truck rates for fruits and vegetables increased less than half as much as did rail freight rates for fruits and vegetables between Jan-

uary 1974 and December 1976 and for farm products between January 1974 and December 1977 (table 1).<sup>1</sup> Percentage rail rate increases in 1974 and 1975, in particular, were well above the percentage increases in these representative truck rates for fruits and vegetables, and likely are above in 1978.

**Table 1—Truck and rail freight rates: Index numbers for specified commodity groups and periods (January 1974=100)**

Type of rates	December			
	1974	1975	1976	1977
<i>January 1974 = 100</i>				
Rates for produce:				
Truck <sup>1</sup> .....	110	112	116	125
USDA rail <sup>2</sup> .....	115	131	139	n.a.
BLS rail <sup>3</sup> .....	118	137	144	154
<i>Percent</i>				
Rate change from previous year:				
Truck .....	10.0	1.2	3.6	7.8
USDA rail .....	15.0	13.9	6.1	n.a.
BLS rail .....	18.0	16.1	5.1	6.9

<sup>1</sup> Computed from 72 series of representative rates for movements during the first full week of each month. Several of the 150 rate series from which these 72 series were selected were published in *The Fruit Situation* and *The Vegetable Situation*, various issues since 1975. These are unweighted indexes. <sup>2</sup> Computed from annual rail freight rate indexes for fresh fruits and vegetables (1967=100) released by the Economics, Statistics, and Cooperatives Service, U.S. Department of Agriculture. End-of-year indexes were approximated by averaging adjacent annual indexes. <sup>3</sup> Computed from monthly rail freight indexes for farm products (1969=100) released by the Bureau of Labor Statistics, U.S. Department of Labor.

However, the truck rate patterns over the 1974-77 period among commodity, shipping point, and market groups were diverse, with some of the group indexes having substantial increases in 1974 and others showing no changes until 1977 (table 2).

No major fuel price or truck-driver wage increases have occurred in 1978. Thus, the relatively low rate of increase (or decrease, in some instances) in 1978 rates discussed above may be indicative of somewhat less pressure of demand for or somewhat greater supply of exempt trucking

**Table 2—Truck freight rates: Unweighted index numbers for fresh fruits and vegetables, by commodity groups, shipping points and markets, (January 1974=100)<sup>1</sup>**

Group	December rate indexes			
	1974	1975	1976	1977
<i>January 1974 = 100</i>				
Commodity groups, all shipping points & markets:				
Citrus .....	112	101	103	111
Green vegetables .....	104	104	108	119
Apples .....	114	122	131	132
Potatoes .....	115	124	128	138
Shipping points, all commodities & markets:				
Lakeland, Florida .....	86	87	93	97
South FL .....	100	100	100	116
Imperial Valley .....	105	115	127	121
Southern CA .....	127	108	110	124
Yakima, WA .....	118	132	138	143
Western & Central NY ...	128	124	132	147
Markets, all commodities & shipping points				
Pittsburgh .....	99	102	106	114
Los Angeles .....	108	112	114	119
Chicago .....	107	110	115	126
New York City .....	111	114	119	127
Atlanta .....	118	115	120	129

<sup>1</sup> Computed from 72 series of representative rates for movements during the first full week of each month. Several of the 150 rate series from which these 72 series were selected were published in *The Fruit Situation* and *The Vegetable Situation*, various issues since 1975. Each of the groupings shown in this table contained five or more rate series.

services in 1978 than existed in 1977. As noted earlier, the July 1978 season in California was one conspicuous exception.

New truck driver contracts are to be negotiated to become effective in 1979, but these contracts will apply directly to only a small proportion of the drivers hauling produce. Nonetheless, the easy transfer of trucking capacity between regulated and exempt trucking may result in upward pressure on exempt rates in 1979.

#### Are Truck Rates for Produce Random?

Because interstate truck rates for fresh fruits and vegetables are not regulated by the Interstate Commerce Commission, rates are not usually published. Rates may vary from shipper to shipper at a given time or among shipments over time from given shippers. Differences in rates may serve to attract additional truck capacity to the areas of most urgent need. This occurs as independent truckers shift among commodities and corridors in response to rate signals obtained from exempt truck brokers or other sources.

California and some other shipping points reportedly have had frequent changes over recent years in the supply-demand balance for trucks to

<sup>1</sup> Seventy-two series for which rates were available in January 1974 and December of each of the 4 years were used in construction of rate indexes. Table 1 shows unweighted indexes computed from these 72 exempt truck rate series, base period weighted indexes of rail rates for fruits and vegetables released annually by the Economics, Statistics, and Cooperatives Service (ESCS), and indexes of probability-sampled rail rates for farm products released monthly by the Bureau of Labor Statistics (BLS).



accommodate seasonal produce transport demands. Outbound rates in such a setting are likely to vary widely unless government or industry regulates the rates. In production areas close to major consumption centers in the Midwest and Northeast, minor shifts in movement patterns of empty trucks can often accommodate such changes in truck-service demands with minimal cost and/or outbound rate changes.

The rate series now available make it possible to assess the ways in which rates have behaved. Rates for 1974-77 are used for these analyses.

### **Truck Rates Have Changed As Traffic Loads Changed**

Declines in rates were relatively more numerous than average in September, November, and December in each of the 4 years, while increases were relatively more numerous in April, May, June, and October in each of the 4 years.<sup>2</sup> These patterns are consistent with seasonal trends in produce harvests. Harvests pick up in volume beginning in late March and continue to build until July or August. There is then a lull until the fall potato and apple harvests begin in September and October. These two crops are shipped to distant markets over several months, but their volume is large in relation to that of other fruits and vegetables. Movement of these crops to storage and processing locations during harvest is heavy. After this fall harvest rush, truck traffic of fruits and vegetables, except for citrus, declines to low levels during the winter months.

Rate increases have predominated in all years, but did so particularly in 1974 and 1976. The overall cost and availability of trucks for exempt traffic may account for these yearly patterns. In late 1973 and 1974, there was considerable turmoil in interstate trucking, and large price increases for fuels and highway speed limit reduction occurred. Late in 1974 and continuing in 1975, the general economy was in recession. Many owner-operator truckers, usually working under contract with trucking companies, may have moved into exempt trucking until general economic conditions again generated demand for their contract services. Also, the slack demand from the regulated sector may have created a willingness on the part of contract owner-operators to wait longer periods or detour longer distances to obtain return loads of produce. Such conditions would have tended to keep rate increases in 1975 relatively fewer than occurred in 1974 and 1976.

<sup>2</sup>For convenience, month-to-month differences in these representative rates are called changes, declines, increases, etc.

### **Stable Rates and Reported Truck Shortages**

Rates reported for the Rio Grande Valley and south Florida shipping points were unusually stable (table 3).<sup>3</sup> There was no change in the representative monthly rates reported from south Florida between January 1974 and February 1977, and only four rate changes from the Rio Grande Valley. Those for the Valley were for dry onions to Chicago for which rates dropped from \$1.10 in March to \$1.00 in April and went back up to \$1.10 in May in both 1975 and 1976. No rates were reported for the Valley in 1977. Some shippers in both Florida and the Rio Grande Valley reported shortages of trucks to transport fruits and vegetables in 1976 and 1977.<sup>4</sup>

### **Rates from California Shipping Points Were Especially Seasonal**

California shipping points experienced relatively more frequent rate changes than did most other shipping points (table 3). This was due, in part, to the fact that California has longer shipping seasons than do other shipping points. These longer seasons gave time for seasonal rate patterns to be reflected there. As one indication of this, rate changes between adjacent months for California shipping points were more evenly distributed between increases and decreases than were those for all other areas (table 4).

A joint University of California-USDA study in the 1960's found that exempt traffic out of California shipping points falls to low levels in December and January but rises about three times as high in June and July. These seasonal traffic trends are consistent with the seasonal patterns of rate changes for California shipping points (table 5).

Despite shorter seasons in most other shipping points, rate decreases were relatively more frequent

<sup>3</sup>To exclude the possibility of regulation-induced stability, the rates used in developing this table were only for interstate movements. There were 520 additional month-to-month rate comparisons for intrastate movements. Of these, only 60 (or 12 percent) were different from previous months. Nearly all of these 60 changes were increases.

<sup>4</sup>The rate indexes presented in table 2 for the Lakeland, Florida shipping point suggest that a new source of empty trucks developed in this area after January 1974. It is possible that truckers carrying loads of meats and other goods to south Florida consumption points may have begun in 1974 to return empty as far as the Lakeland area in order to get more attractive rates than offered by south Florida shippers. This could have led to truck shortages in south Florida. However, conclusions about causes of the observed patterns cannot be reached in this limited assessment.



in the fall and increases were relatively more frequent in the spring. Thus, the rate patterns for other shipping points also were consistent with patterns of seasonal traffic loads.

**Table 3—Truck freight rates: Variability in representative rates reported monthly for interstate movements of fresh fruits and vegetables from selected shipping points, January 1974 to December 1977<sup>1</sup>**

Shipping points	Possible changes in rates (no.) <sup>2</sup>	Actual changes in rates	
		Number	% of possible
Fresno .....	112	83	74
Nogales .....	123	78	63
Imperial .....	127	79	62
Salinas-Watsonville .....	258	154	60
Southern CA .....	464	272	59
Lakeland .....	248	125	50
Yakima .....	351	154	44
Western & Central			
NY State .....	168	28	17
Idaho Falls .....	124	20	16
South FL .....	487	30	6
Rio Grande Valley .....	196	4	2

<sup>1</sup>Several of the rate series from which this tables was composed were published in *The Fruit Situation* and *The Vegetable Situation*, various issues since 1975. <sup>2</sup>The numbers in this column represent the total number of months for which rates were reported for the respective shipping points, less one month for each of the rate series available for the respective groups, i.e., seasonal discontinuity in rate series was ignored in making these counts.

## Conclusions

This limited assessment of the behavior of representative monthly truck rates series suggests that exempt truck rates have behaved in logical patterns. The demand for transport service is derived from the demand for commodities that must be transported. However, in the case of fresh produce, seasonal production patterns also influence the demand for transport services. As harvests of produce increase in the spring, the demand schedule for truck transport is shifted upward.<sup>5</sup> As harvest and supplies of produce taper off the demand shifts downward.

A more detailed analysis of the exempt truck rate data in conjunction with produce unloads data, provided by the Federal State Market News Services, might yield some additional useful information about truck supply-demand relationships at selected produce shipping points. However, the regulated and exempt transportation markets do not operate independently of each other. Therefore, complex joint effects of "regional" and "national" transportation market forces may confound the results of analyses based on data for produce alone.

<sup>5</sup>In the extreme case where increased supplies of produce result in retail and farm price declines such that it is no longer profitable to harvest, the quantity of transport service demanded will decline.

**Table 4—Truck freight rates: Changes in adjacent representative rates reported monthly for movements of fresh fruits and vegetables from shipping points in California in comparison to those from all other shipping points, Jan. 1974 to Dec. 1977<sup>1</sup>**

Shipping points	Direction of month-to-month rate changes					
	Increases		Decreases		Total	
	Number	Percent	Number	Percent	Number	Percent
California, all .....	300	56.2	253	43.8	553	100
All others .....	282	65.9	146	34.1	428	100
TOTAL .....	582	59.3	399	40.7	981	100

<sup>1</sup>Several of the rate series from which this table was compiled were published in *The Fruit Situation* and *The Vegetable Situation* various issues since 1975. Seasonal discontinuity in rate series was not ignored in making these counts. Chi-square for the distributions between California and all other shipping points was statistically significant at less than 0.01.

**Table 5—Truck freight rates: Seasonality in direction of changes in adjacent representative rates reported monthly for movements of fresh fruits and vegetables from shipping points in California, January 1974 to December 1977<sup>1</sup>**

Period	Increases in rates		Decreases in rates		Total changes in rates	
	Number	Percent	Number	Percent	Number	Percent
February-July .....	210	79.2	55	20.8	265	100
August-September .....	29	23.2	96	76.8	125	100
October .....	37	59.7	25	40.3	62	100
November-January .....	24	23.8	77	76.2	101	100
TOTAL .....	300	54.2	253	45.8	553	100

<sup>1</sup>Several of the rate series from which this table was computed were published in *The Fruit Situation* and *The Vegetable Situation*, various issues since 1975. Seasonal discontinuity in rate series was not ignored in making these counts.

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